<210> 775

<211> 45

<212> PRT

<213> Homo sapiens

<400> 775

Thr Trp Trp Pro Pro Cys Pro Pro Ala Pro Met Gly Gln Val Gly Ser
1 5 10 15

Cys Phe Ala Gly Leu Cys Gly Gln His Thr Arg Gly Leu His Gly Trp 20 25 30

Pro Gln Pro Ser Pro Ala Ala Pro Gln Met Arg Ser Cys
35 40 45

<210> 776

<311> 17

<212> PRT

<213> Homo sapiens

<400> 776

Gly Trp Cys Ser Arg Arg Asp Ser Cys Trp Pro Ser Pro Pro Thr Met  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Pro

<210> 777

<211> 120

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 777

Met Gly Thr Val Ser Ser Arg Arg Ser Trp Trp Pro Leu Pro Leu Leu 1 5 10 15

Leu Leu Leu Leu Leu Gly Pro Ala Gly Ala Arg Ala Gln Glu 20 25 30

Asp Glu Asp Gly Asp Tyr Glu Glu Leu Val Leu Ala Leu Arg Ser Glu 35 40 45

Glu Asp Gly Leu Ala Glu Ala Pro Glu His Gly Thr Thr Ala Thr Phe
50 60

His Arg Cys Ala Lys Asp Pro Trp Arg Leu Pro Gly Thr Tyr Val Val 65 70 75 80

Val Leu Lys Glu Glu Thr His Leu Ser Gln Ser Glu Arg Thr Ala Arg 85 90 95

Arg Leu Gln Ala Gln Ala Xaa Arg Arg Gly Tyr Leu Pro Arg Ser Cys
100 105 110

Met Ser Ser Met Ala Phe Phe Leu 115 120

<210> 778

<211> 269

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (236)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (257)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 778

Met Gly Thr Val Ser Ser Arg Arg Ser Trp Trp Pro Leu Pro Leu Leu 1 5 10 15

Leu Leu Leu Leu Leu Gly Pro Ala Gly Ala Arg Ala Gln Glu 20 25 30

Asp Glu Asp Gly Asp Tyr Glu Glu Leu Val Leu Ala Leu Arg Ser Glu 35 40 45

Glu Asp Gly Leu Ala Glu Ala Pro Glu His Gly Thr Thr Ala Thr Phe 50 60

His Arg Cys Ala Lys Asp Pro Trp Arg Leu Pro Gly Thr Tyr Val Val 65 70 75 80

Val Leu Lys Glu Glu Thr His Leu Ser Gln Ser Glu Arg Thr Ala Arg 85 90 95

Arg Leu Gln Ala Gln Ala Ala Arg Arg Gly Tyr Leu Thr Lys Ile Leu 100 105 110

His Val Phe His Gly Leu Leu Pro Gly Phe Leu Val Lys Met Ser Gly 115 120 125

Asp Leu Leu Glu Leu Ala Leu Lys Leu Pro His Val Asp Tyr Ile Glu 130 135 140

Ile Thr Pro Pro Arg Tyr Arg Ala Asp Glu Tyr Gln Pro Pro Asp Gly
165 170 175

Gly Ser Leu Val Glu Val Tyr Leu Leu Asp Thr Ser Ile Gln Ser Asp 180 185 190

His Arg Glu Ile Glu Gly Arg Val Met Val Thr Asp Phe Glu Asn Val 195 200 205

Pro Glu Glu Asp Gly Thr Arg Phe His Arg Gln Ala Ser Lys Cys Asp 210 215 220

Ser His Gly Pro Thr Trp Gln Gly Trp Ser Ala Xaa Gly Met Pro Ala 225 230 235 240

Trp Pro Arg Val Pro Ala Cys Ala Ala Cys Ala Cys Phe Pro Lys Lys 245 250 255

Xaa Pro Leu Gly Gly Pro Pro Gln Lys Lys Gly Gly 260 265

<210> 779

<211> 107

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (92)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 779

Met Val Arg Tyr Thr Tyr Ser Met Leu Ser Val Ile Gly Ile Ser Tyr  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ala Val Leu Thr Trp Leu Ser Gln Thr Leu Trp Met Pro Ile Tyr Pro 20 25 30

Leu Cys Val Leu Ala Glu Ala Phe Ala Ile Tyr Gln Ser Leu Pro Tyr 35 40 45

Phe Glu Ser Phe Gly Thr Tyr Ser Thr Lys Leu Pro Phe Asp Leu Ser 50 55 60

Ile Tŷr Phe Pro Tyr Val Leu Lys Ile Tyr Leu Met Met Leu Phe Ile 65 70 75 80

Gly Met Tyr Phe Thr Tyr Ser His Leu Tyr Ser Xaa Arg Arg Asp Ile  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Leu Gly Ile Phe Pro Ile Lys Lys Lys Met 100 105

<210> 780

<211> 37

<212> PRT

<213> Homo sapiens

<400> 780

Met Val Arg Tyr Thr Tyr Ser Met Leu Ser Val Ile Gly Ile Ser Tyr 1 5 10 15

Ala Val Leu Thr Trp Ala Gln Ser Asn Thr Met Asp Ala Asn Leu Ser 20 25 30

Phe Val Cys Ser Cys 35

<210> 781

<211> 107

<212> PRT

<213> Homo sapiens

<400> 781

Met Val Arg Tyr Thr Tyr Ser Met Leu Ser Val Ile Gly Ile Ser Tyr 1 5 10 15

Ala Val Leu Thr Trp Leu Ser Gln Thr Leu Trp Met Pro Ile Tyr Pro 20 25 30

Leu Cys Val Leu Ala Glu Ala Phe Ala Ile Tyr Gln Ser Leu Pro Tyr 35 40 45

Phe Glu Ser Phe Gly Thr Tyr Ser Thr Lys Leu Pro Phe Asp Leu Ser 50 55 60

Ile Tyr Phe Pro Tyr Val Leu Lys Ile Tyr Leu Met Met Leu Phe Ile 65 70 75 80

Gly Met Tyr Phe Thr Tyr Ser His Leu Tyr Ser Glu Arg Arg Asp Ile 85 90 95

Leu Gly Ile Phe Pro Ile Lys Lys Lys Met
100 105

<210> 782

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 782

Ser Asn Pro Ser His Ile Leu Met Ile Ser Ile Leu Leu Ser His Ala 1 5 10 15

Ser Arg Gly Ala Gly Ala Asp Pro Lys Arg Ser Cys Cys Pro Gln Arg

Val Gly Ser Arg Gly Arg Ala Xaa Val Arg Leu Thr Arg Leu Cys Ser 35 40 45

Gln Pro Ser Pro His

<210> 783

<211> 33

<212> PRT

<213> Homo sapiens

<400> 783

His His Val Ala Gln Ala Leu Pro Pro Ala Gly Ala Pro Arg Gly Arg
1 5 10 15

Pro His Gln Pro His Pro Ala Pro Val Gly Gln Gly Ser Pro Glu Arg 20 25 30

Gly

<210> 784

<211> 74

<212> PRT

<213> Homo sapiens

<400> 784

Met Gly Phe His His Val Ser Gln Ala Ala Leu Val Leu Leu Leu 1 5 10 15

Leu Leu Leu Leu Leu Phe Asp Thr Glu Ser Arg Ser Ser Leu Ala 20 25 30

Thr Glu Arg Asp Ser Ile Ser Lys Lys Lys Asn Lys Lys Thr Lys Lys 35 40 45

Lys Asn Arg Lys Glu Thr Lys Asn Val Val Leu Ile Leu Ile Asn Ser 50 55 60

Asn Ser Phe Met Trp Leu Ala Ala Ala Leu 65 70

<210> 785

<211> 74

<212> PRT

<213> Homo sapiens

<400> 785

Met Gly Phe His His Val Ser Gln Ala Ala Leu Val Leu Leu Leu Leu 1 5 10 15

Leu Leu Leu Leu Leu Phe Asp Thr Glu Ser Arg Ser Ser Leu Ala 20 25 30

Thr Glu Arg Asp Ser Ile Ser Lys Lys Lys Asn Lys Lys Thr Lys Lys
35 40 45

Lys Asn Arg Lys Glu Thr Lys Asn Val Val Leu Ile Leu Ile Asn Ser 50 60

Asn Ser Phe Met Trp Leu Ala Ala Ala Leu 65 70

<210> 786

<211> 178

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (157)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (170)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (171)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (177)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 786

Met Ala Ala Pro Arg Gly Arg Ala Ala Pro Trp Thr Thr Ala Leu Leu
1 10 15

Leu Leu Leu Ala Ser Gln Val Leu Ser Pro Gly Ser Cys Ala Asp Glu 20 25 30

Glu Glu Val Pro Glu Glu Trp Val Leu Leu His Val Val Gln Gly Gln
35 40 45

Ile Gly Ala Gly Asn Tyr Ser Tyr Leu Arg Leu Asn His Glu Gly Lys
50 55 60

Ile Val Leu Arg Met Arg Ser Leu Lys Gly Asp Ala Asp Leu Tyr Val 65 70 75 80

Ser Ala Ser Ser Leu His Pro Ser Phe Asp Asp Tyr Glu Leu Gln Ser 85 90 95

Ala Thr Cys Gly Pro Asp Ala Val Ser Ile Pro Ala His Phe Arg Arg
100 105 110

Pro Val Gly Ile Gly Val Tyr Gly His Pro Ser His Leu Glu Ser Glu 115 120 125

Phe Glu Met Lys Val Tyr Tyr Asp Gly Thr Val Glu Gln His Pro Phe 130 140

Gly Glu Ala Ala Tyr Pro Ala Asp Gly Gln Met Pro Xaa Arg Ser Thr 145 150 155 160

Leu Val Pro Arg Lys Thr Pro Arg Lys Xaa Xaa Asn Leu Phe Ser Gly 165 170 175

Xaa Tyr

<210> 787

<211> 191

<212> PRT

<213> Homo sapiens

<400> 787

Met Ala Ala Pro Arg Gly Arg Ala Ala Pro Trp Thr Thr Ala Leu Leu 1 5 10 15

Leu Leu Leu Ala Ser Gl<br/>n Val Leu Ser Pro Gly Ser Cys Ala Asp Glu 20 25 30

Glu Glu Val Pro Glu Glu Trp Val Leu Leu His Val Val Gln Gly Gln 35 40 45

Ile Gly Ala Gly Asn Tyr Ser Tyr Leu Arg Leu Asn His Glu Gly Lys 50 60

Ile Val Leu Arg Met Arg Ser Leu Lys Gly Asp Ala Asp Leu Tyr Val 65 70 75 80

Ser Ala Ser Ser Leu His Pro Ser Phe Asp Asp Tyr Glu Leu Gln Ser 85 90 95

Ala Thr Cys Gly Pro Asp Ala Val Ser Ile Pro Ala His Phe Arg Arg 100 105 110

Pro Val Gly Ile Gly Val Tyr Gly His Pro Ser His Leu Glu Ser Glu 115 120 125

Phe Glu Met Lys Val Tyr Tyr Asp Gly Thr Val Glu Gln His Pro Phe 130 135 140

Gly Glu Ala Ala Tyr Pro Ala Asp Gly Ala Asp Ala Gly Gln Lys His 145 150 155 160

Ala Gly Ala Pro Glu Asp Ala Ser Gln Glu Glu Glu Ser Val Leu Trp
165 170 175

Thr Ile Leu Ile Ser Ile Leu Lys Leu Glu Leu Glu Ile Leu Phe 180 185 190

<210> 788

<211> 8

<212> PRT

<213> Homo sapiens

<400> 788

Thr Ala Ile Phe Phe Deu Leu Val

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PCT/US01/11988

. 5

<210> 789

<211> 56 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 789

Met Arg Phe Trp Phe Leu Val Phe Xaa Phe Phe Phe Pro Glu Ala 1 5 10 15

His Val Tyr Pro Thr Ser Trp Xaa Val Ser Glu Gln Gly Xaa Ala Thr 20 25 30

Ile Scr Val Thr Pro Gly Ile Leu Asn Trp Ile Phe Val Glu Glu 35 40 45

Asn Asn Thr Val Leu Asp Phe Pro 50 55

<210> 790

<211> 279

<212> PRT

<213> Homo sapiens

<400> 790

Glu Glu Arg Trp Lys Ser Pro Glu Val Arg Trp Ala Pro Gly Val Ala

Met Glu Glu Ser Gly Tyr Glu Ser Val Leu Cys Val Lys Pro Asp Val 20 25 30

His Val Tyr Arg Ile Pro Pro Arg Ala Thr Asn Arg Gly Tyr Arg Ala

Ala Glu Trp Gln Leu Asp Gln Pro Ser Trp Ser Gly Arg Leu Arg Ile
50 55 60

Thr Ala Lys Gly Gln Met Ala Tyr Ile Lys Leu Glu Asp Arg Thr Ser 65 70 75 80

Gly Glu Leu Phe Ala Gln Ala Pro Val Asp Gln Phe Pro Gly Thr Ala 85 90 95

- Val Glu Ser Val Thr Asp Ser Ser Arg Tyr Phe Val Ile Arg Ile Glu
  100 105 110
- Asp Gly Asn Gly Arg Arg Ala Phe Ile Gly Ile Gly Phe Gly Asp Arg 115 120 125
- Gly Asp Ala Phe Asp Phe Asn Val Ala Leu Gln Asp His Phe Lys Trp 130 140
- Val Lys Gln Gln Cys Glu Phe Ala Lys Gln Ala Gln Asn Pro Asp Gln 145 150 155 160
- Gly Pro Lys Leu Asp Leu Gly Phe Lys Glu Gly Gln Thr Ile Lys Leu 165 170 175
- Asn Ile Ala Asn Met Lys Lys Lys Glu Gly Ala Ala Gly Asn Pro Arg 180 185 190
- Val Arg Pro Ala Ser Thr Gly Gly Leu Ser Leu Leu Pro Pro Pro 195 200 205
- Gly Gly Lys Thr Ser Thr Leu Ile Pro Pro Gly Glu Gln Leu Ala 210 215 220
- Val Gly Gly Ser Leu Val Gln Pro Ala Val Ala Pro Ser Ser Gly Gly 225 230 235 240
- Ala Pro Val Pro Trp Pro Gln Pro Asn Pro Ala Thr Ala Asp Ile Trp 245 250 255
- Gly Asp Phe Thr Lys Ser Thr Gly Ser Thr Ser Ser Gln Thr Gln Pro  $260 \hspace{1cm} 265 \hspace{1cm} 270 \hspace{1cm}$
- Gly Thr Gly Trp Val Gln Phe 275

<210> 791

<211> 106

<212> PRT

<213> Homo sapiens

<400> 791

- Arg Ser Arg Ser Lys Pro Arg Cys Asn Cys Glu Ile Val Thr Ile Phe  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$
- Phe Ala Arg Phe Lys Ile Gly Pro Gly Arg His Arg Lys Arg Lys Ile
  20 25 30
- Pro Lys Leu Cys Ser Ser Gly Ser Thr Ile Gly Arg Val Tyr Ser Leu 35 40 45
- Pro Gly Leu Leu Arg Arg Gly Ser Cys Leu Phe Gly Tyr Ile Thr Pro 50 60
- Asp Trp Phe Val Leu Lys Ile Asn Val Ile Met Leu Val Ser Tyr Leu

65 70 75 80

Met Val Ser Leu Glu His Ser Pro Leu Ile Leu Phe Glu Arg Val Gly 85 90 95

Gly Arg Asp Cys Glu Gly Arg Glu Lys Cys 100 · 105

<210> 792

<211> 56

<212> PRT

<213> Homo sapiens

<400> 792

Met Arg Phe Trp Phe Leu Val Phe Cys Phe Phe Phe Phe Pro Glu Ala
1 5 10 15

His Val Tyr Pro Thr Ser Trp Ser Val Ser Glu Gln Gly Cys Ala Thr 20 25 30

Ile Ser Val Thr Pro Gly Ile Leu Asn Trp Ile Phe Val Glu Glu Glu 35 40 45

Asn Asn Thr Val Leu Asp Phe Pro 50 55

<210> 793

<211> 41

<212> PRT

<213> Homo sapiens

<400> 793

Met Thr Phe Ser Pro Leu Met Cys Tyr Cys Cys Cys Trp Val Gly Trp 1 5 10 15

Ala Phe Cys Leu Phe Val Trp Trp Gln Ser Val Val Val Gly Ser Gly
20 25 30

Arg Ala Tyr Ile Gly Phe Ser Ser Tyr 35 40

<210> 794

<211> 41

<212> PRT

<213> Homo sapiens

<400> 794

Met Thr Phe Ser Pro Leu Met Cys Tyr Cys Cys Cys Trp Val Gly Trp 1 5 10 15

Ala Phe Cys Leu Phe Val Trp Trp Gln Ser Val Val Val Gly Ser Gly 20 25 30

Arg Ala Tyr Ile Gly Phe Ser Ser Tyr

35 40

<210> 795

<211> 41

<212> PRT

<213> Homo sapiens

<400> 795

Met Thr Phe Ser Pro Leu Met Cys Tyr Cys Cys Cys Trp Val Gly Trp  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ala Phe Cys Leu Phe Val Trp Trp Gln Ser Val Val Val Gly Ser Gly 20 25 30

Arg Ala Tyr Ile Gly Phe Ser Ser Tyr 35 40

<210> 796

<211> 43

<212> PRT

<213> Homo sapiens

<400> 796

Phe Leu Arg Phe Asp Gly Ile Ile Met Glu Ala Leu Tyr Lys Leu Asn 1 5 10 15

Glu Ile Gly Lys Gly Glu Leu Thr Leu Ser Ile Met His Ser Gly Leu 20 25 30

Lys Ile Arg Phe Gln Asn Glu Met Ser Asp Leu 35 40

<210> 797

<211> 12

<212> PRT

<213> Homo sapiens

<400> 797

Ile Gly Val Asn Tyr Leu Leu Leu Phe Phe Ile Phe 1 5 10

<210> 798

<211> 19

<212> PRT

<213> Homo sapiens

<400> 798

Lys Leu Gly Phe Ser Thr Ile Leu Leu Ser Ile Phe Ile Met Ser 1 5 10 15

Glu Ala Asn

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<210> 799
<211> 19
<212> PRT
<213> Homo sapiens
<400> 799
Lys Leu Gly Phe Ser Thr Ile Leu Leu Ser Ile Phe Ile Met Ser
                       10
Glu Ala Asn
<210> 800
<211> 23
<212> PRT
<213> Homo sapiens
<400> 800
Leu Cys Val Cys Thr Gly Cys Pro Gly Gly Gly Pro Gln Ile Pro Phe
Arg Trp Gln Thr Glu Arg Gly
<210> 801
<211> 29
<212> PRT
<213> Homo sapiens
<400> 801
Val Cys Val Cys Leu Ile Ala Arg Val Tyr Phe Cys Ile Tyr
Val Cys Val Trp Leu His Gly Cys Ala Ser Val Cys Leu
             20
<210> 802
<211> 6
<212> PRT
<213> Homo sapiens
<400> 802
Val Leu Pro Ser Ala Ser
 1
<210> 803
<211> 35
<212> PRT
<213> Homo sapiens
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<220>

<021> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 803

Met Arg Ala Ser Gly Val Tyr Val Ser Xaa Cys Ser Phe Val Phe Met 1 5 10 15

Cys Val Cys Met Leu Asn Ser Arg Xaa Thr Phe Asp Tyr Gly 20 25 30

Val Cys Gly 35

<210> 804

<211> 56

<212> PRT

<213> Homo sapiens

<400> 804

Met Arg Ala Ser Gly Val Tyr Val Ser Glu Cys Ser Phe Val Phe Met  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Cys Val Cys Wet Ser Asp Cys Thr Gly Val Leu Leu Tyr Leu 20 25 30

Cys Val Cys Val Val Ala Arg Val Cys Leu Cys Val Ser Leu Thr Leu 35 40 45

Ala Gly Cys Val Cys Lys Ser Val

<210> 805

<211> 60

<212> PRT

<213> Homo sapiens

<400> 805

Met Ile Arg Ile Gln Phe Leu His Leu Phe Leu Trp Val Gly Phe Ile
1 5 10 15

Phe Arg Gln Pro Pro Ser Ser Tyr Pro Gln Asp Gly Arg Asp Ser Pro 20 25 30

Trp Ser Phe Pro Cys Arg Asp Arg Ser Pro Gly Asn Asn Thr Ser Ile
35 40 45

Pro Ser His Glu Thr Val Leu Asn Phe Ile Leu Thr 50 55 60

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<210> 806
<211> 60
<212> PRT
<213> Homo sapiens
<400> 806
Met Ile Arg Ile Gln Phe Leu His Leu Phe Leu Trp Val Gly Phe Ile
                    10
       5
Phe Arg Gln Pro Pro Ser Ser Tyr Pro Gln Asp Gly Arg Asp Ser Pro
Trp Ser Phe Pro Cys Arg Asp Arg Ser Pro Gly Asn Asn Thr Ser Ile
Pro Ser His Glu Thr Val Leu Asn Phe Ile Leu Thr
     50
                        55
<210> 807
<211> 444
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 807
Met Leu Gln Arg Ile Gly Leu Ile Phe Leu His Asn Ile Val Val Val
                                    10
Ser Asn Cys Phe Tyr Phe Gln Ala Phe Leu Asp Glu Phe Thr Asn Trp
             20
                                25
                                                   30
```

Ser Arg Ile Asn Pro Asn Lys Ala Arg Ile Pro Met Ala Gly Asp Thr 35 40 45

- Gln Gly Val Val Gly Thr Val Ser Lys Pro Cys Phe Thr Ala Tyr Glu 50 55 60
- Met Lys Ile Gly Ala Ile Thr Phe Gln Val Ala Thr Gly Asp Ile Ala 65 70 75 80
- Thr Glu Gln Val Asp Val Ile Val Asn Ser Thr Xaa Arg Thr Xaa Asn 85 90 95
- Xaa Xaa Ser Gly Xaa Ser Arg Ala Ile Leu Glu Gly Ala Gly Gln Ala 100 105 110
- Val Glu Ser Glu Cys Ala Val Leu Ala Ala Gln Pro His Arg Asp Phe 115 120 125
- Pro Gly Gly Lys Asp Val Arg Lys Thr Val Thr Ser Val Leu Glu Glu 145 150 150 160
- Cys Glu Gln Arg Lys Tyr Thr Ser Val Ser Leu Pro Ala Ile Gly Thr \$165\$ \$170\$ \$175\$
- Gly Asn Ala Gly Lys Asn Pro Ile Thr Val Ala Asp Asn Ile Ile Asp 180 185 190
- Ala Ile Val Asp Phe Ser Ser Gln His Ser Thr Pro Ser Leu Lys Thr
  195 200 205
- Val Lys Val Val Ile Phe Gln Pro Glu Leu Leu Asn Ile Phe Tyr Asp 210 215 220
- Ser Met Lys Lys Arg Asp Leu Ser Ala Ser Leu Asn Phe Gln Ser Thr 225 230 235 240
- Phe Ser Met Thr Cys Asn Leu Pro Glu His Trp Thr Asp Met Asn 245 250 255
- His Gln Leu Phe Cys Met Val Gln Leu Glu Pro Gly Gln Ser Glu Tyr 260 265 270
- Asn Thr Ile Lys Asp Lys Phe Thr Arg Thr Cys Ser Ser Tyr Ala Ile 275 280 285
- Glu Lys Ile Glu Arg Ile Gln Asn Ala Phe Leu Trp Gln Ser Tyr Gln 290 295 300
- Val Lys Lys Arg Gln Met Asp Ile Lys Asn Asp His Lys Asn Asn Glu 305 310 315 320
- Arg Leu Leu Phe His Gly Thr Asp Ala Asp Ser Val Pro Tyr Val Asn 325 330 335
- Gln His Gly Phe Asn Arg Ser Cys Ala Gly Lys Asn Ala Val Ser Tyr 340 345 350

Gly Lys Gly Thr Tyr Phe Ala Val Asp Ala Ser Tyr Ser Ala Lys Asp 355 360 365

Thr Tyr Ser Lys Pro Asp Ser Asn Gly Arg Lys His Met Tyr Val Val 370 375 380

Arg Val Leu Thr Gly Val Phe Thr Lys Gly Arg Ala Gly Leu Val Thr 385 390 395 400

Pro Pro Pro Lys Asn Pro His Asn Pro Thr Asp Leu Phe Asp Ser Val
405 410 415

Thr Asn Asn Thr Arg Ser Pro Lys Leu Phe Val Val Phe Phe Asp Asn 420 425 430

Gln Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Thr Ala 435 440

<210> 808

<211> 505

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (358)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (494)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (504)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (505)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 808

Met Phe Arg Thr Ala Val Met Met Ala Ala Ser Leu Ala Leu Thr Gly
1 5 10 15

Ala Val Val Ala His Ala Tyr Tyr Leu Lys His Gln Phe Tyr Pro Thr 20 25 30

Val Val Tyr Leu Thr Lys Ser Ser Pro Ser Met Ala Val Leu Tyr Ile 35 40 45

Gln Ala Phe Val Leu Val Phe Leu Leu Gly Lys Val Met Gly Lys Val
50 60

Phe Phe Gly Gln Leu Arg Ala Ala Glu Met Glu His Leu Leu Glu Arg 65 70 75 80

Ser	Trp	Tyr	Ala	Val 85	Thr	Glu	Thr	Cys	Leu 90	Ala	Phe	Thr	Val	Phe 95	Arg
qaA	Asp	?he	Ser 100	Pro	Arg	Phe	Val	Ala 105	Leu	Phe	Thr	Leu	Leu 110	Leu	Phe
Leu	Lys	Cys 115	Phe	His	Trp	Leu	Ala 120	Glu	Asp	Arg	Val	Asp 125	Phe	Met	Glu
Arg	Ser 130	Pro	Asn	Ile	Ser	Trp 135	Leu	Phe	His	Cys	Arg 140	Ile	Val	Ser	Leu
Met 145	Phe	Leu	Leu	Gly	Ile 150	Leu	Asp	Phe	Leu	Phe 155	Val	Ser	His	Ala	Tyr 160
His	Ser	Ile	Leu	Thr 165	Arg	Gly	Ala	Ser	Val 170	Gln	Leu	Val	Phe	Gly 175	Phe
Glu	Tyr	Ala	Ile 180	Leu	Met	Thr	Met	Val 185	Leu	Thr	Ile	Phe	Ile 190	Lys	Tyr
Val	Leu	His 195	Ser	Val	Asp	Leu	Gln 200	Ser	Glu	Asn	Pro	Trp 205	Asp	Asn	Lys
Ala	Val 210	Tyr	Met	Leu	Tyr	Thr 215	Glu	Leu	Phe	Thr	Gly 220	Phe	Ile	Lys	Val
Leu 225	Leu	Tyr	Met	Ala	Phe 230	Met	Thr	Ile	Met	Ile 235	Lys	Val	His	Thr	Phe 240
D×o	Lou	Phe	Ala	Tle	Ara	Pro	Met	Tyr	Leu	Ala	Met	Arq	Gln	Pho	Lvs
PIO	ьeu	11.0		245	••• 9			-	250			,		255	<b>2</b> ,5
				245					250				Arg 270	255	
Lys	Ala	Val	Thr 260	245 Asp	Ala	Ile	Met	Ser 265	250 Arg	Arg	Ala	Ile	Arg	255 Asn	Met
Lys Asn Asn	Ala Thr Val 290	Val Leu 275 Cys	Thr 260 Tyr	245 Asp Pro	Ala Asp Cys	Ile Ala Arg 295	Met Thr 280	Ser 265 Pro Glu	250 Arg Glu Met	Arg Glu Val	Ala Leu Thr 300	Ile Gln 285 Gly	Arg 270 Ala Ala	255 Asn Met Lys	Met Asp Arg
Lys Asn Asn	Ala Thr Val 290	Val Leu 275 Cys	Thr 260 Tyr	245 Asp Pro	Ala Asp Cys	Ile Ala Arg 295	Met Thr 280	Ser 265 Pro Glu	250 Arg Glu Met	Arg Glu Val	Ala Leu Thr 300	Ile Gln 285 Gly	Arg 270 Ala	255 Asn Met Lys	Met Asp Arg
Lys Asn Asn Leu 305	Ala Thr Val 290 Pro	Val Leu 275 Cys	Thr 260 Tyr Ile Asn	245 Asp Pro Ile	Ala Asp Cys Ile 310	Ile Ala Arg 295 Phe	Met Thr 280 Glu His	Ser 265 Pro Glu	250 Arg Glu Met Ser	Arg Glu Val Cys 315	Ala Leu Thr 300 Leu	Ile Gln 285 Gly Arg	Arg 270 Ala Ala	255 Asn Met Lys Trp	Met Asp Arg Phe 320
Lys Asn Asn Leu 305	Ala Thr Val 290 Pro	Val Leu 275 Cys Cys	Thr 260 Tyr Ile Asn Gln	245 Asp Pro Ile His Thr 325	Ala Asp Cys Ile 310 Cys	Ile Ala Arg 295 Phe	Met Thr 280 Glu His	Ser 265 Pro Glu Thr	250 Arg Glu Met Ser Arg 330	Arg Glu Val Cys 315 Met	Ala Leu Thr 300 Leu	Ile Gln 285 Gly Arg	Arg 270 Ala Ala Ser	255 Asn Met Lys Trp Arg 335	Asp Arg Phe 320
Lys Asn Asn Leu 305 Gln Ser	Ala Thr Val 290 Pro Arg	Val Leu 275 Cys Cys Gln Pro	Thr 260 Tyr Ile Asn Gln Ala 340	245 Asp Pro Ile His Thr 325 Gln	Ala Asp Cys Ile 310 Cys	Ile Ala Arg 295 Phe Pro	Met Thr 280 Glu His Thr	Ser 265 Pro Glu Thr Cys Pro 345	250 Arg Glu Met Ser Arg 330 Pro	Arg Glu Val Cys 315 Met	Ala Leu Thr 300 Leu Asp	Ile Gln 285 Gly Arg Val	Arg 270 Ala Ala Ser Leu	255 Asn Met Lys Trp Arg 335 Gln	Met Asp Arg Phe 320 Ala
Lys Asn Asn Leu 305 Gln Ser	Ala Thr Val 290 Pro Arg Leu Pro	Val Leu 275 Cys Cys Gln Pro	Thr 260 Tyr Ile Asn Gln Ala 340 Ala	245 Asp Pro Ile His Thr 325 Gln Pro	Ala Asp Cys Ile 310 Cys Ser	Ile Ala Arg 295 Phe Pro	Met Thr 280 Glu His Thr Pro	Ser 265 Pro Glu Thr Cys Pro 345	250 Arg Glu Met Ser Arg 330 Pro	Arg Glu Val Cys 315 Met Glu Leu	Ala Leu Thr 300 Leu Asp Pro	Ile Gln 285 Gly Arg Val Ala Gln 365	Arg 270 Ala Ala Ser Leu Asp 350	255 Asn Met Lys Trp Arg 335 Gln Pro	Asp Arg Phe 320 Ala

Gly Glu Ala Val Ala Pro Pro Ser Thr Ser Ala Ala Ala Leu Ser Arg 405 410 415

Pro Ser Gly Ala Ala Thr Thr Thr Ala Ala Gly Thr Ser Ala Thr Ala 420 425 430

Ala Ser Ala Thr Ala Ser Gly Pro Gly Ser Gly Ser Ala Pro Glu Ala 435 440 445

Gly Pro Ala Pro Gly Phe Pro Phe Pro Pro Pro Trp Met Gly Met Pro 450 460

Leu Pro Pro Pro Phe Ala Phe Pro Pro Met Pro Val Pro Pro Ala Gly 465 470 480

Phe Ala Gly Leu Thr Pro Glu Glu Tyr Glu Leu Trp Arg Xaa Met Ser 485 490 495

Gly Arg Thr Gly Gly Pro Val Xaa Xaa 500 505

<210> 809

<211> 191

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 809

Met Phe Arg Thr Ala Val Met Met Ala Ala Ser Ile Trp Pro Arg Leu
1 5 10 15

Trp Xaa Cys Pro Xaa Gly Trp Pro Cys Pro Trp Phe Pro Leu Pro Ser 20 25 30

Ser Leu Asp Gly Tyr Ala Pro Ala Ser Thr Leu Cys Leu Pro Pro Asn 35 40 45

Ala Cys Ala Pro Cys Gly Phe Ala Gly Leu Thr Pro Glu Glu Leu Arg

Ala Leu Glu Gly His Glu Arg Gln His Leu Glu Ala Arg Leu Gln Ser 65 70 75 80

Leu Arg Asn Ile His Thr Leu Leu Asp Ala Ala Met Leu Gln Ile Asn 85 90 95

Gln Tyr Leu Thr Val Leu Ala Ser Leu Gly Pro Pro Arg Pro Ala Thr

Ser Val Asn Ser Thr Glu Glu Thr Ala Thr Thr Val Val Ala Ala Ala 115 120 125

Ser Ser Thr Ser Ile Pro Ser Ser Glu Ala Thr Thr Pro Thr Pro Gly 130 135 140

Ala Ser Pro Pro Ala Pro Glu Met Glu Arg Pro Pro Ala Pro Glu Ser 145 150 155 160

Val Gly Thr Glu Glu Met Pro Glu Asp Gly Glu Pro Asp Ala Ala Glu 165 170 175

Leu Arg Arg Arg Leu Gln Lys Leu Glu Ser Pro Val Ala His 180 185 190

<210> 810

<211> 617

<212> PRT

<213> Homo sapiens

<400> 810

Met Phe Arg Thr Ala Val Met Met Ala Ala Ser Leu Ala Leu Thr Gly  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ala Val Val Ala His Ala Tyr Tyr Leu Lys His Gln Phe Tyr Pro Thr  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Val Val Tyr Leu Thr Lys Ser Ser Pro Ser Met Ala Val Leu Tyr Ile 35 40 45

Gln Ala Phe Val Leu Val Phe Leu Leu Gly Lys Val Met Gly Lys Val
50 55 60

Phe Phe Gly Gln Leu Arg Ala Ala Glu Met Glu His Leu Leu Glu Arg 65 70 75 80

Ser Trp Tyr Ala Val Thr Glu Thr Cys Leu Ala Phe Thr Val Phe Arg 85 90 95

Asp Asp Phe Ser Pro Arg Phe Val Ala Leu Phe Thr Leu Leu Phe 100 . 105 110

Leu Lys Cys Phe His Trp Leu Ala Glu Asp Arg Val Asp Phe Met Glu 115 120 125

Arg Ser Pro Asn Ile Ser Trp Leu Phe His Cys Arg Ile Val Ser Leu 130 140

Met Phe Leu Leu Gly Ile Leu Asp Phe Leu Phe Val Ser His Ala Tyr 145 150 155 160

His Ser Ile Leu Thr Arg Gly Ala Ser Val Gln Leu Val Phe Gly Phe 165 \$170 \$175

Glu Tyr Ala Ile Leu Met Thr Met Val Leu Thr Ile Phe Ile Lys Tyr 180 185 190

Val Leu His Ser Val Asp Leu Gln Ser Glu Asn Pro Trp Asp Asn Lys 195 200 Ala Val Tyr Met Leu Tyr Thr Glu Leu Phe Thr Gly Phe Ile Lys Val 215 Leu Leu Tyr Met Ala Phe Met Thr Ile Met Ile Lys Val His Thr Phe 230 235 Pro Leu Phe Ala Ile Arg Pro Met Tyr Leu Ala Met Arg Gln Phe Lys 250 Lys Ala Val Thr Asp Ala Ile Met Ser Arg Arg Ala Ile Arg Asn Met Asn Thr Leu Tyr Pro Asp Ala Thr Pro Glu Glu Leu Gln Ala Met Asp 280 Asn Val Cys Ile Ile Cys Arg Glu Glu Met Val Thr Gly Ala Lys Arg 295 Leu Pro Cys Asn His Ile Phe His Thr Ser Cys Leu Arg Ser Trp Phe Gln Arg Gln Gln Thr Cys Pro Thr Cys Arg Met Asp Val Leu Arg Ala 330 Ser Leu Pro Ala Gln Ser Pro Pro Pro Glu Pro Ala Asp Gln Gly 345 Pro Pro Pro Ala Pro His Pro Pro Pro Leu Leu Pro Gln Pro Pro Asn 360 Phe Pro Gln Gly Leu Leu Pro Pro Phe Pro Pro Gly Met Phe Pro Leu Trp Pro Pro Met Gly Pro Phe Pro Pro Val Pro Pro Pro Pro Ser Ser 390 395 Gly Glu Ala Val Ala Pro Pro Ser Thr Ser Ala Ala Ala Leu Ser Arg 405 410 Pro Ser Gly Ala Ala Thr Thr Ala Ala Gly Thr Ser Ala Thr Ala 425 Ala Ser Ala Thr Ala Ser Gly Pro Gly Ser Gly Ser Ala Pro Glu Ala 435 440 Gly Pro Ala Pro Gly Phe Pro Phe Pro Pro Pro Trp Met Gly Met Pro 455 Leu Pro Pro Pro Phe Ala Phe Pro Pro Met Pro Val Pro Pro Ala Gly 470 465 Phe Ala Gly Leu Thr Pro Glu Glu Leu Arg Ala Leu Glu Gly His Glu 485 490 Arg Gln His Leu Glu Ala Arg Leu Gln Ser Leu Arg Asn Ile His Thr 505 510

Leu Leu Asp Ala Ala Met Leu Gln Ile Asn Gln Tyr Leu Thr Val Leu 515 520 525

Ala Ser Leu Gly Pro Pro Arg Pro Ala Thr Ser Val Asn Ser Thr Glu 530 535 540

Glu Thr Ala Thr Thr Val Val Ala Ala Ala Ser Ser Thr Ser Ile Pro 545 550 555 560

Ser Ser Glu Ala Thr Thr Pro Thr Pro Gly Ala Ser Pro Pro Ala Pro 565 570 575

Glu Met Glu Arg Pro Pro Ala Pro Glu Ser Val Gly Thr Glu Glu Met 580 585 590

Pro Glu Asp Gly Glu Pro Asp Ala Ala Glu Leu Arg Arg Arg Leu 595 600 605

Gln Lys Leu Glu Ser Pro Val Ala His 610 615

<210> 811

<211> 20

<212> PRT

<213> Homo sapiens

<400> 811

Met Asn Val Arg Leu Val Leu Asn Pro Phe Pro Leu Tyr Ser Val Tyr 1 5 10 15

Val Ile Pro Asn

<210> 812

<211> 11

<212> PRT

<213> Homo sapiens

<400> 812

Leu Glu Ile Leu Val Val Lys Lys Leu Leu Ala 1 5 10

<210> 813

<211> 20

<212> PRT

<213> Homo sapiens

<400> 813

Val Ile Pro Asn

20

<210> 814

<211> 62

<212> PRT

<213> Homo sapiens

<400> 814

Met Leu Cys Pro Ala Leu Gly Pro Phe Leu Leu Phe Leu Leu Ser Ser 1 5 10 15 .

Thr Leu Met Ala Ser Phe Met Gly Asp Thr Pro Cys His Pro Gly Glu 20 25 30

Leu Ser Ala Phe Gly Val Ala Pro Ser Arg Val Phe Thr Ser Ser Phe 35 40 45

Leu Phe Thr Val Phe Thr Pro Ser Tyr Pro Ser Leu Pro Gly 50 55 60

<210> 815

<211> 62

<212> PRT

<213> Homo sapiens

<400> 815

Met Leu Cys Pro Ala Leu Gly Pro Phe Leu Leu Phe Leu Leu Ser Ser 1 5 10 15

Thr Leu Met Ala Ser Phe Met Gly Asp Thr Pro Cys His Pro Gly Glu 20 25 30

Leu Ser Ala Phe Gly Val Ala Pro Ser Arg Val Phe Thr Ser Ser Phe 35 40 45

Leu Phe Thr Val Phe Thr Pro Ser Tyr Pro Ser Leu Pro Gly 50 55 60

<210> 816

<211> 51

<212> PRT

<213> Homo sapiens

<400> 816

Gln Ala Ser Trp Val Trp Trp Leu Thr Thr Val Ile Pro Ala Leu Trp

1 10 15

Glu Ala Arg Ala Gly Gly Ser Leu Glu Pro Arg Ser Ser Arg Leu Ala 20 25 30

Trp Ala Thr Gln Lys Val Phe Ile Ser Lys Lys Lys Lys Lys Lys 35 40 45

Arg Ala Ala 50

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<210> 817
<211> 19
<212> PRT
<213> Homo sapiens
<400> 817
Leu Val Cys Phe Val Ile Phe Arg Leu Trp Tyr Met Cys Val Phe Thr
                        10
Leu Trp Ala
<210> 818
<211> 4
<212> PRT
<213> Homo sapiens
<400> 818
Phe Leu Ser Ser
1
<210> 819
<211> 53
<212> PRT
<213> Homo sapiens
<400> 819
Met Phe Ile Ser Leu Phe Ile Phe Gly Leu Val Arg Leu Trp Pro Cys
1 5
Cys Val Val Ile Tyr Phe Val Tyr Ser Ile Cys Lys His Gln Cys Ser
Gln Glu Ala His Ser Ser Ile Phe Asn Cys Lys Phe Val Ser Gln Ser
                           40
Gln Phe Ser Ile Met
<210> 820
<211> 53
<212> PRT
<213> Homo sapiens
<400> 820
Met Phe Ile Ser Leu Phe Ile Phe Gly Leu Val Arg Leu Trp Pro Cys
Cys Val Val Ile Tyr Phe Val Tyr Ser Ile Cys Lys His Gln Cys Ser
```

Gln Glu Ala His Ser Ser Ile Phe Asn Cys Lys Phe Val Ser Gln Ser

35 40 45

Gln Phe Ser Ile Met 50

<210> 821

<211> 283

<212> PRT

<213> Homo sapiens

<400> 821

Met Ile Phe Leu Leu Leu Met Leu Ser Leu Glu Leu Gln Leu His Gln 1 5 10 15

Ile Ala Ala Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
20 25 30

Glu His Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser 35 40 45

His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn 50 55 60

Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu 65 70 75 80

Pro Leu Gly Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp 85 90 95

Glu Gly Gln Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr 100 105 110

Lys Tyr Leu Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr 115 120 125

His Ile Leu Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln 130 135 140

Ala Thr Gly Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val
145 150 155 160

Pro Ala Asn Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val 165 170 175

Thr Ser Val Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys 180 185 190

Val Phe Trp Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp 195 200 205

Leu Gln Ser Gln Met Glu Pro Arg Thr His Pro Thr Trp Leu Leu His 210 215 220

Ile Phe Ile Pro Ser Cys Ile Ile Ala Phe Ile Phe Ile Ala Thr Val 225 230 235 240

Ile Ala Leu Arg Lys Gln Leu Cys Gln Lys Leu Tyr Ser Ser Lys Asp 245 250 255

Thr Thr Lys Arg Pro Val Thr Thr Thr Lys Arg Glu Val Asn Ser Ala 260 265 270

Val Asn Leu Asn Leu Trp Ser Trp Glu Pro Gly 275 280

<210> 822

<211> 93

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (92)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 822

Met Ile Phe Leu Leu Leu Met Leu Ser Leu Glu Leu Gln Leu His Gln 1 5 10 15

Ile Ala Ala Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile 20 25 30

Glu His Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser 35 40 45

His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn 50 55 60

Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu 65 70 75 80

Pro Leu Gly Lys Ala Ser Phe Pro Xaa Leu Lys Xaa Lys 85 90

<210> 823

<211> 23

<212> PRT

<213> Homo sapiens

<400> 823

Leu Phe Leu Leu Glu Ile Ser Thr His Leu Cys Phe Trp Lys Ser 1 5 10 15

Leu Arg Lys Leu Glu Gly Lys
20

<210> 824

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<211> 46
```

<212> FRT

<213> Homo sapiens

<400> 824

Met Pro Trp Leu Lys Ser Leu Leu His Phe Ser Leu Phe Leu Val Val 1 5 10 15

Phe Ser Thr Leu Ala Val Lys Ser Leu Gly Val Pro Val Ala Ala Gly 20 25 30

Ser Pro Phe Cys Ile Val Asp Val Leu His Phe Ile Leu Leu 35 40 45

<210> 825

<211> 46

<212> PRT

<213> Homo sapiens

<400> 825

Met Pro Trp Leu Lys Ser Leu Leu His Phe Ser Leu Phe Leu Val Val 1 5 10 15

Phe Ser Thr Leu Ala Val Lys Ser Leu Gly Val Pro Val Ala Ala Gly 20 25 30

Ser Pro Phe Cys Ile Val Asp Val Leu His Phe Ile Leu Leu 35 40 45

<210> 826

<211> 67

<212> PRT

<213> Homo sapiens

<400> 826

Met Asp Arg Gly Val Met Cys Leu Leu Ala Ser Trp Pro Gly Leu Gly
1 5 10 15

Ala Gln Phe Cys Gly Ala Gly Val Cys Pro Leu Arg Val Pro Ser Leu 20 25 30

Glu Pro Thr Leu Pro Asn Asp Gly Gly Gly Leu Glu Ala Leu Thr Leu 35 40 45

Gly Gly Lys Glu Ala Lys Glu Arg Trp Arg Trp Lys Gly Arg Pro Gly 50 55 60

Gln Gly Gly 65

<110> 827

<211> 83

<212> PRT

<213> Homo sapiens

<400> 827

Gly His Val Leu Ala Tyr Ser Ser Trp Pro Ser Leu Ala Pro Gly Leu 1 5 10 15

Ser Val Gln Tyr Phe Val Ser Arg Val Glu Val Pro Asn Pro Gly Cys 20 25 30

Thr Leu Glu Ala Pro Gly Lys Leu Ser Glu Phe Leu Arg Pro Glu Pro 35 40 45

His Pro Lys Pro Ile Ser Ser Glu Ser Leu Gly Gly Thr Glu Pro Gly 50 55 60

Phe Cys Gln Leu Lys Pro Ala Met Val Thr Ser Val Ser Ser Tyr Thr 65 70 75 80

Glu Asn Ser

<210> 828

<211> 67

<212> PRT

<213> Homo sapiens

<400> 828

Met Asp Arg Gly Val Met Cys Leu Leu Ala Ser Trp Pro Gly Leu Gly
1 5 10 15

Ala Gln Phe Cys Gly Ala Gly Val Cys Pro Leu Arg Val Pro Ser Leu 20 25 30

Glu Pro Thr Leu Pro Asn Asp Gly Gly Gly Leu Glu Ala Leu Thr Leu
35 40 45

Gly Gly Lys Glu Ala Lys Glu Arg Trp Arg Trp Lys Gly Arg Pro Gly 50 55 60

Gln Gly Gly 65

<210> 829

<211> 83

<212> PRT

<213> Homo sapiens

<400> 829

Gly His Val Leu Ala Tyr Ser Ser Trp Pro Ser Leu Ala Pro Gly Leu 1 5 15

Ser Val Gln Tyr Phe Val Ser Arg Val Glu Val Pro Asn Pro Gly Cys 20 25 30

Thr Leu Glu Ala Pro Gly Lys Leu Ser Glu Phe Leu Arg Pro Glu Pro 35 40 45

His Pro Lys Pro Ile Ser Ser Glu Ser Leu Gly Gly Thr Glu Pro Gly 50 60

Phe Cys Gln Leu Lys Pro Ala Met Val Thr Ser Val Ser Ser Tyr Thr 65 70 75 80

Glu Asn Ser

<210> 830

<211> 66

<2112> PRT

<213> Homo sapiens

<0.220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 830

Ser Trp Val Asp Phe Asp Cys Val Xaa Glu Val Ser Tyr Leu Asn Ser 1 5 10 15  $\cdot$ 

Gly Ser Tyr Ser Leu Val Leu His Leu Glu Gly Leu His Pro Leu Glu 20 25 30

Leu Ser Gly Lys Leu Ala Ile Asp Phe Gly Lys Lys Arg Glu Phe Cys 35 40 45

Val Asp Gly Val Gly Gly Ala Thr Leu Val Ile Cys Pro Gly Phe Gln 50 60

Asp Phe 65

<210> 831

<211> 61

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 831

Met Trp Tyr Val Cys Ala Cys Val Cys Val Cys Val Xaa Val Cys Ser 1 5 10

Tyr Asn Arg Arg Thr Gly Lys Val Arg Thr Gln Asn Asn Glu Asp Leu 20 25 30

Leu Lys Cys Gly Gly Gly Val Cys Val Cys Val Phe Ile Glu Gln Glu 35 40 45

Asp Arg Lys Gly Asm Asp His Pro Trp Lys Met Lys Gly

50 55 60

<210> 832

<211> 11

<212> PRT

<213> Homo sapiens

<400> 832

Val Cys Cys Cys Leu His Leu Asn Ala Phe Val 1 5 10

<210> 833

<211> 716

<212> PRT

<213> Homo sapiens

<400> 833

Met Asn Asn Phe Arg Ala Thr Ile Leu Phe Trp Ala Ala Ala Ala Trp 1 5 10 15

Ala Lys Ser Gly Lys Pro Ser Gly Glu Met Asp Glu Val Gly Val Gln 20 25 30

Lys Cys Lys Asn Ala Leu Lys Leu Pro Val Leu Glu Val Leu Pro Gly 35 40 45

Gly Gly Trp Asp Asn Leu Arg Asn Val Asp Met Gly Arg Val Met Glu
50 55 60

Leu Thr Tyr Ser Asn Cys Arg Thr Thr Glu Asp Gly Gln Tyr Ile Ile 65 70 75 80

Pro Asp Glu Ile Phe Thr Ile Pro Gln Lys Gln Ser Asn Leu Glu Met 85 90 95

Asn Ser Glu Ile Leu Glu Ser Trp Ala Asn Tyr Gln Ser Ser Thr Ser 100 105 110

Tyr Ser Ile Asn Thr Glu Leu Ser Leu Phe Ser Lys Val Asn Gly Lys 115 120 125

Phe Ser Thr Glu Phe Gln Arg Met Lys Thr Leu Gln Val Lys Asp Gln 130 135 140

Ala Ile Thr Thr Arg Val Gln Val Arg Asn Leu Val Tyr Thr Val Lys 145 150 155 160

Ile Asn Pro Thr Leu Glu Leu Ser Ser Gly Phe Arg Lys Glu Leu Leu 165 170 175

Asp Ile Ser Asp Arg Leu Glu Asn Asn Gln Thr Arg Met Ala Thr Tyr 180 185 190

Leu Ala Glu Leu Leu Val Leu Asn Tyr Gly Thr His Val Thr Thr Ser 195 200 205

Val Asp Ala Gly Ala Ala Leu Ile Gln Glu Asp His Leu Arg Ala Ser 215 Phe Leu Gln Asp Ser Gln Ser Ser Arg Ser Ala Val Thr Ala Ser Ala 230 235 Gly Leu Ala Phe Gln Asn Thr Val Asn Phe Lys Phe Glu Glu Asn Tyr Thr Ser Gln Asn Val Leu Thr Lys Ser Tyr Leu Ser Asn Arg Thr Asn Ser Arg Val Gln Ser Ile Gly Gly Val Pro Phe Tyr Pro Gly Ile Thr 280 Leu Gln Ala Trp Gln Gln Gly Ile Thr Asn His Leu Val Ala Ile Asp 295 Arg Ser Gly Leu Pro Leu His Phe Phe Ile Asn Pro Asn Met Leu Pro 310 315 Asp Leu Pro Gly Pro Leu Val Lys Lys Val Ser Lys Thr Val Glu Thr 325 330 Ala Val Lys Arg Tyr Tyr Thr Phe Asn Thr Tyr Pro Gly Cys Thr Asp Leu Asn Ser Pro Asn Phe Asn Phe Gln Ala Asn Thr Asp Asp Gly Ser 360 Cys Glu Gly Lys Met Thr Asn Phe Ser Phe Gly Gly Val Tyr Gln Glu 375 Cys Thr Gln Leu Ser Gly Asn Arg Asp Val Leu Leu Cys Gln Lys Leu 390 395 Glu Gln Lys Asn Pro Leu Thr Gly Asp Phe Ser Cys Pro Ser Gly Tyr Ser Pro Val His Leu Leu Ser Gln Ile His Glu Glu Gly Tyr Asn His Leu Glu Cys His Arg Lys Cys Thr Leu Leu Val Phe Cys Lys Thr Val 440 445 Cys Glu Asp Val Phe Gln Val Ala Lys Ala Glu Phe Arg Ala Phe Trp 455 Cys Val Ala Ser Ser Gln Val Pro Glu Asn Ser Gly Leu Leu Phe Gly 465 470 475 Gly Leu Phe Ser Ser Lys Ser Ile Asn Pro Met Thr Asn Ala Gln Ser Cys Pro Ala Gly Tyr Phe Pro Leu Arg Leu Phe Glu Asn Leu Lys Val 505 Cys Val Ser Gln Asp Tyr Glu Leu Gly Ser Arg Phe Ala Val Pro Phe 515 520

Gly Gly Phe Phe Ser Cys Thr Val Gly Asn Pro Leu Val Asp Pro Ala 530 535 540

Ile Ser Arg Asp Leu Gly Ala Pro Ser Leu Lys Lys Cys Pro Gly Gly545550

Phe Ser Gln His Pro Ala Leu Ile Ser Asp Gly Cys Gln Val Ser Tyr 565 570 575

Cys Val Lys Ser Gly Leu Phe Thr Gly Gly Ser Leu Pro Pro Ala Arg 580 585 590

Leu Pro Pro Phe Thr Arg Pro Pro Leu Met Ser Gln Ala Ala Thr Asn 595 600 605

Thr Val Ile Val Thr Asn Ser Glu Asn Ala Arg Ser Trp Ile Lys Asp 610 615 620

Ser Gln Thr His Gln Trp Arg Leu Gly Glu Pro Ile Glu Leu Arg Arg 625 630 635 635

Ala Met Asn Val Ile His Gly Asp Gly Gly Gly Leu Ser Gly Gly Ala 645 650 655

Ala Ala Gly Val Thr Val Gly Val Thr Thr Ile Leu Ala Val Val Ile  $660 \hspace{1.5cm} 665 \hspace{1.5cm} 670$ 

Thr Leu Ala Ile Tyr Gly Thr Arg Lys Phe Lys Lys Lys Ala Tyr Gln 675 680 685

Ala Ile Glu Glu Arg Gln Ser Leu Val Pro Gly Thr Ala Ala Thr Gly 690 695 700

Asp Thr Thr Tyr Gln Glu Gln Gly Gln Ser Pro Ala 705 710 715

<210> 834

<211> 94

<212> PRT

<213> Homo sapiens

<400> 834

Leu Ala Val Ile Met Ala Arg Pro Ala Ala Glu Pro Leu Cys Phe Leu
1 10 15

Asn Pro Lys Leu Leu Ala Leu Ala Val Gly Val Leu Glu Leu Gly 20 25 30

Arg Gly Phe Leu Asp Ser Ser Pro Leu Leu Arg Pro Ala Ser Asp Gly 35 40 45

Glu Arg Phe Thr Trp Glu Ala Leu Gly Glu Ser Leu Pro Phe Ser Asp 50 55 60

Thr Phe Ala Ser Ser Val Phe Pro Val Pro Gly Val Phe Ser Ala Pro 65 70 75 80

Ala Gly Ala Glu Ala Phe Val Leu Gly Met Val Met Pro Thr

<222> (25)

85 90

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<210> 835
<211> 39
<212> PRT
<213> Homo sapiens
<400> 835
Met His Leu Leu Pro Trp Arg Ala Ala Ala Pro Pro Leu Leu Ile
                                    10
Ala Val Pro Pro Arg Pro Ser Arg Ser Pro Val Gln Pro Pro Ser Leu
                                25
                                                   30
Gly Ala Ala Asn Pro Ser Ala
        35
<210> 836
<211> 9
<212> PRT
<213> Homo sapiens
<400> 836
Pro Ser Ala Ala Ala Ser Ala Thr Pro
1 5
<210> 837
<211> 63
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<000>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids
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- <220>
- <221> SITE
- <222> (35)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (38)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (48)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (49)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 837
- Met His Leu Leu Pro Trp Arg Ala Ala Ala Ala Xaa Pro Leu Xaa 1 5 10 15
- Ala Val Pro Xaa Arg Ala Xaa Arg Xaa Pro Val Gln Ala Pro Ser Leu 20 25 30
- Gly Ala Xaa Asn Pro Xaa Arg Gly Thr Gln Val Ala Thr Val Ser Xaa 35 40 45
- Xaa Ser Gly Lys Leu Leu Gly Leu Lys Ala Pro Arg Pro Lys Pro
  50 55 60
- <210> 838
- <211> 84
- <212> PRT
- <213> Homo sapiens
- <400> 838
- Thr Tyr Ser Phe Cys Val Cys Glu Arg Ala Phe Val Phe Gly Ser Val
  1 5 10 15
- Pro Arg Ala Glu Val Glu Gln Gly Cys Thr Tyr His Gly Lys Gly Gly 25 30
- Arg Lys Glu Asn Trp Ile Ala Cys Asp Leu Trp Trp Asn Leu Phe Leu 35 40 45
- Leu Pro Arg Pro Phe Arg Pro Cys Leu Ile Ser Val Gly His Phe Arg 50 55 60
- Leu Trp Gln Gly Arg Ala Gly Leu Gln Ser Glu Val Pro Ala Ser Ser 65 70 75 80

Leu Glu His Asn

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<210> 839
<311> 77
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 839
Leu Gly Gly Tyr Ala Leu Ser Xaa Xaa Xaa Asn Arg Val Thr Asp Xaa
                                    10
Val Met Ile Tyr Phe Phe Ile Ile Ile Val Glu Tyr Phe Tyr Gly Lys
             20
                                2.5
Ile Phe Val Val Leu Ile Ile Pro Ile Lys Ile Met Pro Asn Thr Lys
                             40
Tyr Glu Phe Tyr Asp Val His Phe Val Leu Gly Ile Lys Arg Lys Lys
His Thr Ser Trp Lys Ser Val Ser Cys Phe Leu Leu
                     70
<210> 840
<211> 184
<212> PRT
<213> Homo sapiens
<400> 840
Met Ser Arg Thr Ala Tyr Thr Val Gly Ala Leu Leu Leu Leu Gly
Thr Leu Leu Pro Ala Ala Glu Gly Lys Lys Gly Ser Gln Gly Ala
Ile Pro Pro Pro Asp Lys Ala Gln His Asn Asp Ser Glu Gln Thr Gln
                             40
                                                 45
        35
```

Ser Pro Gln Gln Pro Gly Ser Arg Asn Arg Gly Arg Gly Gln Gly Arg 50 55 60

Gly Thr Ala Met Pro Gly Glu Glu Val Leu Glu Ser Ser Gln Glu Ala
65 70 75 80

Leu His Val Thr Glu Arg Lys Tyr Leu Lys Arg Asp Trp Cys Lys Thr 85 90 95

Gln Pro Leu Lys Gln Thr Ile His Glu Glu Gly Cys Asn Ser Arg Thr 100 105 110

Ile Ile Asn Arg Phe Cys Tyr Gly Gln Cys Asn Ser Phe Tyr Ile Pro 115 120 125

Arg His Ile Arg Lys Glu Glu Gly Ser Phe Gln Ser Cys Ser Phe Cys 130 135 140

Lys Pro Lys Lys Phe Thr Thr Met Met Val Thr Leu Asn Cys Pro Glu 145 150 155 160

Leu Gln Pro Pro Thr Lys Lys Lys Arg Val Thr Arg Val Lys Gln Cys
165 170 175

Arg Cys Ile Ser Ile Asp Leu Asp 180

<210> 841

<211> 87

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 841

Xaa His Ser His Trp Glu Gly Leu Lys Leu Cys Cys Leu Asn Pro Val 1 5 10 15

Leu Gly Pro Ala Arg Lys Arg Lys Arg Xaa Leu Arg Asn Arg Gly Ala
20 25 30

Arg Gly Gly Cys Arg Cys His Ser Arg Ala Ala Leu His Pro His Pro 35 40 45

His Ala Ser Cys Phe Thr Ala His Ser Val Thr Glu Leu Val Ala Leu 50 55 60

Gly Thr Gly Gly His Pro His Thr Leu Met Pro Thr Ala Glu Gly Arg 65 70 75 80

Ala Thr His Pro Ser Arg Asp 85

<210> 842

<211> 77

<212> PRT

<213> Homo sapiens

<400> 842

Phe Val Leu His Cys Leu Asn Ser His Leu His Leu Ala Leu Gln 1 5 10 15

Phe Pro Leu Asn Thr Leu Ser Ser Pro Leu Val Cys Cys Gln Ser Ala 20 25 30

Ala Leu Pro Ile Lys Ala Cys Ile Asn Tyr Ile Cys Pro Met Phe Thr 35 40 45

Phe Ile Lys His Phe Pro Cys Thr Pro Val Pro Thr Ser Gln Gln Thr 50 60

Arg Glu Arg Ala Val Gln Leu Met Ser Leu Pro Ser Phe 65 70 75

<210> 843

<211> 41

<212> PRT

<213> Homo sapiens

<400> 843

Met Ala Phe Pro Arg Val Gly Ala Phe Leu Phe Leu Ala Ser Leu Ser 1 5 10 15

Ser Leu Leu His Cys Arg Leu Leu Ala Glu Ala Val Ser Gly Arg Ser 20 25 30

Val Ser Leu Ala Pro Ser Ile Ile Arg 35 40

<210> 844

<211> 164

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (95)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 844

Arg Met Xaa Cys Ser Gln Pro Pro Arg Cys His Phe Gln Ser Asp Phe 1 5 10 15

Gln Lys Cys Ala Pro Cys Pro Arg Ala Gln Thr His Trp Leu Glu Pro 20 25 30

Pro Gly Arg Val Gln Thr Ile Ser Ser Met Arg Asn Ala Gln Lys Gly 35 40 45

Phe Ala Asp Ser Ile Arg Leu Trp Arg Leu Pro Ala Ser Gly Val Gly 50 55 60

Trp Val Val Ser Pro Pro Ile Gln Thr Gln Glu Val Ala Pro Glu Gly 65 70 75 80

Met Tyr Leu Val Gly Ser Ser Ser Gly Thr Leu Gly Gly Cys Xaa Ala 85 90 95

Leu Thr Gln Tyr Phe Ser Leu Ser Pro Leu Trp Gly Ala Cys Val Arg 100 105 110

Ala Arg Val Leu Ala Tyr Ala Phe Leu Cys Gly His Ile Arg Met Pro 115 120 125

Leu Gly Glu His Val His Val Ser Pro Pro Glu Arg Ala Cys Val Cys 130 135 140

Ala Pro Leu Arg Pro Arg Phe Gly Arg Leu Gly Phe Gly Val Pro Val 145 150 155 160

Phe Cys Pro Pro

<210> 845

<211> 80

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 845

Met Gly Thr Ser Thr Ala Trp Arg Val Pro Trp Arg Arg Trp Ala Arg
1 5 10 15

Val Arg Cys Trp Trp Leu Trp Pro Xaa Thr Gly Thr Ala Glu Pro Pro
20 25 30

Gly Thr Ala Gly Trp Gln Gly Leu Ala Gly Gly Arg Cys Arg Glu Ala 35 40 45

Trp Gly Ser Leu Leu Met Gly Met Phe Gly Leu Cys Phe Leu Pro Val 50 55 60

His Ser Gln Ser Cys Leu Ser Ser Ser Ser Pro Thr Pro Arg Pro 70 75

<310> 846 <211> 53 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <400> 846 Ile Gly Pro Xaa Gly Pro Arg Asn Ser Xaa Thr Gly Gly Ala Phe Leu Asp Phe Ser Ala Gln Ala Lys Lys Lys Lys Xaa Gln Phe Leu Lys Ile 20 25 Phe Phe Pro Gly Leu Cys Lys Ser Leu Ile Tyr Gly Ile Phe Val Met

40 35

Gln Arg Asn Thr Leu 50

<210> 847 <211> 50

<212> PRT <213> Homo sapiens

<400> 847

Met Glu Glu Val Ala Phe Met Val Leu Lys Tyr Val Leu Pro Phe Leu 10

Lys Ser Leu Trp Leu His Val Tyr Leu Leu Ala Val Leu Trp Pro Arg 20

Leu Ala Ser Met Ile Ser Phe Gly Ser Arg Leu Phe Gln Ile Val Asp

Gly Ala 5.0

<210> 848 <211> 86 <212> PRT

<213> Homo sapiens

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<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 848
Lys Lys Xaa Pro Xaa Xaa Leu Ser Gly Ser Lys Ala Ile Ala Ser Lys
Thr Lys Glu Ile Glu Gln Val Tyr Arg Gln Asp Cys Glu Thr Phe Gly
Met Val Val Lys Met Leu Ile Glu Lys Asp Pro Ser Leu Glu Lys Ser
         35
                             40
Ile Gln Phe Ala Leu Arg Gln Asn Leu His Glu Ile Gly Glu Arg Cys
Val Glu Glu Leu Lys His Phe Ile Ala Glu Tyr Asp Thr Ser Thr Gln
                    70
                                         75
Asp Phe Gly Glu Pro Phe
<210> 849
<211> 129
<212> PRT
<213> Homo sapiens
<400> 849
Arg Lys Val Glu Gly Gly Ala Ser Gly Leu Asn Gly Phe Pro Asn His
Pro Ser Ser Leu Gly Pro Ala Trp Phe Pro Pro Leu Pro Leu Pro Ser
Thr Leu Ser Arg Thr Gly Leu Met Lys Ala Leu Pro Lys Ile Ser Pro
                             40
Thr Pro Asn Phe Pro Leu Pro Pro Thr Phe Pro Thr Ser Ser Thr Thr
                                   457
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50 55 60

Leu Phe Gly Ala Thr Ala Gly Pro Glu Ala Gln Ser Ala Val Ser Gln 65 70 75 80

Ala Phe Val His Leu Ser Pro Glr Ser Ile Ser Val Leu Gly Glu Ser 85 90 95

His Thr Glu Thr Gln Glu His Pro Leu Pro Glu Leu Arg Glu Val Leu 100 105 110

Ser Leu Arg Gly Gly Leu Ser Ala Val Cys Asn Asn Val Val Leu Phe 115 120 125

Ile

<210> 850

<211> 48

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 850

Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala 1 5 10 15

Gln Leu Leu Val Asn Leu Leu Thr Phe Gly Leu Glu Val Cys Leu 20 25 30

Ala Ala Gly Phe Thr Tyr Val Pro Leu Cys Cys Gly Xaa Xaa Val Xaa 35 40 45

<210> 851

<211> 12

<212> PRT

<213> Homo sabiens

<400> 951

Ile Leu Gln Arg Arg Lys Gln Arg Leu Leu Arg Gly
1 5 . 10

<210> 852

<211> 371

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 852

Met Leu Phe Pro Ser Phe Ser Arg Ser Leu Val Pro Leu Pro His Ala 1 5 10 15

Leu Tyr Leu Xaa Gln Pro Leu Thr His Thr Thr Ser Leu Leu Ala Gly
20 25 30

Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Gly Ser Ala
35 40 45

Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp 50 55 60

Ala Leu Ser Leu Gly Ile Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala . 65 70 75 80

Gly Trp Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu 85 90 95

Ala Leu Leu Ile Leu Gly Val Gly Leu Leu Asp Phe Cys Gly Gln Val
100 105 110

Cys Phe Thr Pro Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro , 115 120 125

Asp His Cys Arg Gln Ala Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu 130 135 140

Gly Gly Cys Leu Gly Tyr Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser 145 150 155 160

Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu 165 170 175

Leu Thr Leu Ile Phe Leu Thr Cys Val Ala Ala Thr Leu Leu Val Ala 180 185 190

Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala 195 200 205

Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe 210 215 220

Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys Cys Arg 225 230 235 240

Met Pro Arg Thr Leu Arg Arg Leu Phe Val Ala Glu Leu Cys Ser Trp 245 250 255

Met Ala Leu Met Thr Phe Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu 260 265 270

Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr Glu Ala Arg 275 280 285

Arg His Tyr Asp Glu Gly Lys Ala Leu Ala Ala Ser Arg Gly Trp Cys 290 295 300

Gly Ser Arg Pro Pro Glu Thr Thr Leu Gly Ala Val Ser Gly Leu Val 305 310 315 320

Pro Leu His Pro Gly Pro Asp Phe Ser Val Arg Lys Val Gly Met Asp 325 330 335

Pro Ile Cys Ile His Gly Phe Ser Trp Val Trp Asn Ile Ser Ala Cys 340 345 350

Gly Phe Arg Lys Ala Ser Gly Cys Ser Arg Ser Leu Ile Arg Val Val 355 360 365

Ala Pro Val 370

<210> 853

<211> 75

<212> PRT

<213> Homo sapiens

<400> 853

Met Gly Pro Leu Trp Gly Ala Pro Leu Arg Ala Trp Ala Ala Gly Ser 1 5 10 15

Val Gly Cys Pro Cys Cys Leu Ser Cys Ala Ser Pro Ser Ser Ile Ser 20 25 30

Ser Ala Gly Asp Pro Leu Ala Ser Cys Ser Thr Cys Gly Ser Thr Trp  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Glu Ile Pro Leu Thr Trp Met Thr Met Asp His Leu Leu Val Arg Tyr
50 55 60

Tyr Leu Ser Gln Ala Arg Trp Cys Thr Thr Gly 65 70 75

<210> 854

<211> 57

<212> PRT

<213> Homo sapiens

<400> 354

Ile Ser Tyr His His Val Dys Ala Ser His Leu Dys Ile Dys Ile Gln

1 5 10 15

Ile Ser Leu Lys Pro Glu Val Leu Val Pro Leu His Cys Leu Pro Leu 20 25 30

Ser Pro Thr Pro Arg Glu Glu Ser Gly Gly Phe Leu Phe Ser Ile Ala 35 40 45

Ile Ala Ala Val Gly Phe Leu Val Gln 50 55

<210> 855

<211> 10

<212> PRT

<213> Homo sapiens

<400> 855

Trp Ala Ser Met Ser Ser Val Phe Gly Leu
1 5 10

<210> 856

<211> 5

<212> PRT

<213> Homo sapiens

<400> 856

Ser Phe Ala Thr Cys
1 5

<210> 857

<211> 73

<212> PRT

<213> Homo sapiens

<400> 857

Met Trp Leu Pro Ala Trp Ala Ala Ile Glu Thr Phe Ser Thr Cys Ser 1 5 10 15

Ser Leu Ser Leu Ser Phe Gln Pro Arg. Trp Ala Leu Ala Ser Glu Gly 20 25 30

Cys Ala Gly Ser Tyr Val Thr Thr His Arg Ala Leu Gly Ala His Leu 35 40 45

Trp Pro Leu Trp Ser Asp Gln Phe Leu Gly Lys Gly Leu Gly Leu Arg
50 55 60

Ile Pro Phe Ile Thr His Ala His Gln 65 70

<210> 858

<211> 36

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 858

Met Ala Gly Glu Met Ala Trp Gly Ala Arg Leu Trp Ile Met Cys
1 10 15

Xaa Leu Leu Phe Leu Ala Ala Ser Glu Gly Ile Met Pro Arg Leu Arg 20 25 30

Ala Ser Ala Trp 35

<210> 859

<311> 352

<212> PRT

<213> Homo sapiens

<400> 859

Val Ser Leu Leu Trp Gly Ile Ser Ile Arg Gly Ala Asp Ala Cys

1 10 15

Ala Asp Ala His Leu Phe Cys Lys Glu Cys Leu Ile Arg Tyr Ala Gln 20 25 30

Glu Ala Val Phe Gly Ser Gly Lys Leu Glu Leu Ser Cys Met Glu Gly 35 40 45

Ser Cys Thr Cys Ser Phe Pro Thr Ser Glu Leu Glu Lys Val Leu Pro 50 55 60

Gln Thr Ile Leu Tyr Lys Tyr Tyr Glu Arg Lys Ala Glu Glu Glu Val
65 70 75 80

Ala Ala Ala Tyr Ala Asp Glu Leu Val Arg Cys Pro Ser Cys Ser Phe 85 90 95

Pro Ala Leu Leu Asp Ser Asp Val Lys Arg Phe Ser Cys Pro Asn Pro
100 105 110

His Cys Arg Lys Glu Thr Cys Arg Lys Cys Gln Gly Leu Trp Lys Glu 115 120 125

His Asn Gly Leu Thr Cys Glu Glu Leu Ala Glu Lys Asp Asp Ile Lys 130 135 140

Tyr Arg Thr Ser Ile Glu Glu Lys Met Thr Ala Ala Arg Ile Arg Lys 145 150 155 160

Cys His Lys Cys Gly Thr Gly Leu Ile Lys Ser Glu Gly Cys Asn Arg 165 170 175

Met Ser Cys Arg Cys Gly Ala Gln Met Cys Tyr Leu Cys Arg Val Ser

180 185 190

Ile Asn Gly Tyr Asp His Phe Cys Gln His Pro Arg Ser Pro Gly Ala 195 200 205

Pro Cys Gln Glu Cys Ser Arg Cys Ser Leu Trp Thr Asp Pro Thr Glu 210 215 220

Asp Asp Glu Lys Leu Ile Glu Glu Ile Gln Lys Glu Ala Glu Glu 225 230 235 240

Gln Lys Arg Lys Asn Gly Glu Asn Thr Phe Lys Arg Ile Gly Pro Pro 245 250 255

Leu Glu Lys Pro Val Glu Lys Val Gln Arg Val Glu Ala Leu Pro Arg 260 265 270

Pro Val Pro Gln Asn Leu Pro Gln Pro Gln Met Pro Pro Tyr Ala Phe 275 280 285

Ala His Pro Pro Phe Pro Leu Pro Pro Val Arg Pro Val Phe Asn Asn 290 295 300

Phe Pro Leu Asn Met Gly Pro Ile Pro Ala Pro Tyr Val Pro Pro Leu 305 310 315 320

Pro Asn Val Arg Val Asn Tyr Asp Phe Gly Pro Ile His Met Pro Leu 325 330 335

Glu His Asn Leu Pro Met His Phe Gly Pro Gln Pro Arg His Arg Phe 340 345 350

<210> 860

<211> 63

<212> PRT

<213> Homo sapiens

<400> 860

Met Ile Thr Phe Leu Pro Ile Ile Phe Ser Ile Leu Val Val Val Thr 1 5 10 15

Phe Val Ile Gly Asn Phe Ala Asn Gly Phe Ile Ala Leu Val Asn Ser 20 25 30

Thr Glu Trp Val Lys Arg Gln Lys Ile Ser Phe Ala Asp Gln Ile Val
35 40 45

Thr Ala Leu Ala Val Ser Arg Val Gly Leu Leu Trp Val Leu Leu 50 55 60

<210> 861

<211> 8

<212> PRT

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<213> Homo sapiens
<400> 861
Leu Thr Met Leu Phe Asn Val Ile
<210> 862
<211> 7
<212> PRT
<213> Homo sapiens
<400> 862
Thr Tyr Ile His Phe Leu Asp
<210> 863
<211> 53
<212> PRT
<213> Homo sapiens
<320>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids
Thr Glu Glu Phe Lys Tyr Ala Val Ser Cys Asn Cys Gly Thr Ala Ala
Trp Val Arg Val Arg Glu Arg Glu Arg Lys Arg Glu Lys Lys Lys
                              25
Lys Arg Xaa Ala Ala Leu Glu Asp Pro Ser Arg Gly Pro Ser Leu Arg
        35
                           40
Val His Ala Thr Ser
    50
<210> 864
<211> 22
<212> PRT
<213> Homo sapiens
<400> 864
Leu Val Leu Phe Ile Thr Leu Leu Pro Gly Lys Leu Ala His Ser Trp
                    10
    5
```

His Thr Val Asn Val Gln 20

<210> 865 <211> 2

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<212> PRT
<213> Homo sapiens
<400> 865
Gly Cys
1
<210> 866
<211> 40
<212> PRT
<213> Homo sapiens
<400> 866
Met Ile Leu Tyr Ile Cys Leu Leu Leu Lys Ile Trp Gly Cys Ser Leu
1 5
                    10
Pro Cys Asn Phe Ser Phe Pro Leu Asp Leu Arg Lys Val Met Asp Phe
Gln Phe Val Gln His Phe Phe Leu
<210> 867
<211> 7
<212> PRT
<213> Homo sapiens
<400> 867
Ser Phe Cys Met Gly Thr Met
<210> 868
<211> 86
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 868
Ser Xaa Ile Val Gly Leu Ala Ile Trp Arg Gly Gly Leu Cys Gln Glu
Leu Pro Leu Glu Arg Phe Leu Leu Xaa Thr Val Phe Gly Ser Asp Leu
                               25
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Ser Leu Leu Ser Gly Gly Asp Leu Cys Leu Glu Leu Leu Gly Gly Leu

35 40 45

Cys Leu Glu Val Cys Leu Arg Gly Asp Ile Cys Leu Gly Pro Leu Arg 50 55 60

Val Ser Val Ser Glu Leu Ser Leu Leu Cys Leu Ser Val Gln Gly Gln 65 70 75 80

Gln Lys Val Cys Pro Phe

<210> 869

<211> 33

<212> PRT

<213> Homo sapiens

<400> 869

Lys Ile Leu Val Ser Tyr Leu Met Pro Gly Met Met Arg Ile Glu Asn 1 5 10 15

Phe Ser Ile Phe Met Cys Leu Thr Gly Cys Leu Gly Ile Asn Phe Ala 20 25 30

Phe

<210> 870

<211> 288

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (87)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (230)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (263)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (264)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (270)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (275)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 870

Met Ala Arg Ile Ser Phe Ser Tyr Leu Cys Pro Ala Ser Trp Tyr Phe 1 5 10 15

Thr Val Pro Thr Val Ser Pro Phe Leu Arg Gln Arg Val Ala Phe Leu 20 25 30

Gly Leu Phe Phe Ile Ser Cys Leu Leu Leu Leu Met Leu Ile Ile Asp 35 40 45

Phe Arg His Trp Ser Ala Ser Leu Pro Arg Asp Arg Gln Tyr Glu Arg 50 55 60

Tyr Leu Ala Arg Val Gly Glu Leu Glu Ala Thr Asp Thr Glu Asp Pro 65 70 75 80

Asn Leu Asn Tyr Gly Leu Xaa Val Asp Cys Gly Ser Ser Gly Ser Arg 85 90  $\cdot$  95

Ile Phe Xaa Tyr Phe Trp Pro Arg His Asn Gly Asn Pro His Asp Leu 100 105 110

Leu Asp Ile Lys Gln Met Arg Asp Arg Asn Ser Gln Pro Val Val Lys
115 120 125

Lys Ile Lys Pro Gly Ile Ser Ala Met Ala Asp Thr Pro Glu His Ala 130 135 140

Ser Asp Tyr Leu Arg Pro Leu Leu Ser Phe Ala Ala Ala His Val Pro 145 150 155 160

Val Lys Lys His Lys Glu Thr Pro Leu Tyr Ile Leu Cys Thr Ala Gly
165 170 175

Met Arg Leu Pro Glu Arg Lys Gln Leu Ala Ile Leu Ala Asp Leu 180 185 190

Val Lys Asp Leu Pro Leu Glu Phe Asp Phe Leu Phe Ser Gln Ser Gln
195 200 205

Ala Glu Val Ile Ser Gly Lys Gln Glu Gly Val Tyr Ala Trp Ile Gly 210 215 220

Ile Asn Phe Val Leu Xaa Arg Phe Asp His Glu Asp Glu Ser Asp Ala 225 230 235 240

Glu Ala Thr Gln Glu Leu Ala Ala Gly Arg Arg Thr Val Gly Ile
245 250 255

Leu Asp Met Gly Gly Ala Xaa Kaa Gln Ile Ala Tyr Glu Xaa Pro Thr

260 265 270

Phe Pro Xaa Lys Lys Thr Pro Pro Leu Phe Pro Leu Cly Cly Ile 275 280 285

<210> 871

<211> 107

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 871

Pro Leu Gly Arg Glu Pro Leu Ala Gly Phe Leu Ser Phe Leu Ser Phe 1 5 10 15

Ser Leu Leu Trp Cys Leu Glu Ala Phe Pro Arg Leu Gln Phe Leu Thr 20 25 30

Thr Leu Thr Asp Phe Ala Ile Val Leu Ser Pro Pro Leu Ser Phe Pro 35 40 45

Lys Leu Thr Leu Trp Arg Leu Ile Lys Arg Lys Asn His Arg Pro Gly 50 55 60

Ala Xaa Leu Thr Pro Arg Arg Arg Ala Asn His Leu Arg Cys Gly Val 65 70 75 80

Arg Asp Gln Pro Asp Gln Asn Arg Glu Thr Pro Ser Leu Leu Asn Asn 85 90 95

Thr Lys Leu Ala Gly Arg Gly Gly Ala Arg Leu 100 105

<210> 872

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 872

Ser Trp Val Ile Val Val Xaa Ile Trp Gly Tyr Leu Leu Glu Gly His 1 5 10 15

Gly Val Pro Phe Cys Lys Ser Tyr Gly Pro Xaa Pro Trp Lys Leu His 20 25 30

Thr His His Ala Ala Tyr Asn Ser Gly Ser Ser Gln Val Tyr Arg Ile 35 40 45

Leu Gly Asn Ser Pro Cys Pro Val Leu Ile His Cys Ser Phe Ser Gly 50 55 60

<210> 873

<211> 14

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 873

Trp Lys Gly Leu Leu Glu Gly Ser Xaa Glu Ala Thr Met Xaa 1 5 10

<210> 874

<211> 66...

<212> PRT

<213> Homo sapiens

<400> 874

Met Ser Trp Val Ile Val Val Ile Ile Trp Gly Tyr Leu Leu Glu Gly 1 5 10 15

His Gly Val Pro Phe Cys Lys Ser Tyr Gly Pro Ser Pro Trp Lys Leu 20 25 30

His Thr His His Ala Ala Tyr Asn Ser Gly Ser Ser Gln Val Tyr Arg 35 40 45

Ile Leu Glu Thr Leu Met Ser Gly Ser Thr His Cys Ser Phe Ser Gly 50 55 60

Thr Phe 65

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<210> 875
<211> 90
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 875
Met Pro Arg Ala Pro Trp Arg Ile Pro Leu Cys Ala Leu Pro Thr Leu
Cys Leu Gly Ser Pro Leu Pro Ser Gln Pro Thr His Pro Ile Xaa Tyr
Asp His Arg Ala Pro Thr Trp Lys Met Ala His Pro Gly Gly Pro Arg
                            40
Ser Ser His Ser Pro Arg Thr Trp Xaa Thr Pro Ser Ser Gln Thr Lys
Ala Ala Leu Pro Ala Gly Gly Ala Arg Asn Ser Pro Leu Gln Leu Cys
                    7.0
Thr Arg Ser Arg Phe Cys Gly Thr Pro Met
<210> 876
<211> 127
<212> PRT
<213> Homo sapiens
<400> 876
Met Pro Arg Ala Pro Trp Arg Ile Pro Leu Cys Ala Leu Pro Thr Leu
Cys Leu Gly Ser Pro Leu Pro Ser Gln Pro Thr His Pro Ile Phe Tyr
Asp His Arg Ala Pro Thr Trp Lys Met Ala His Pro Gly Gly Pro Arg
Ser Ser His Ser Pro Arg Gly Pro Gly Gly His Pro Ala Leu Arg Gln
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Arg Leu Pro Cys Arg Arg Gly Glu Pro Glu Thr Ala Leu Cys Ser Ser

Ala Pro Gly Ala Gly Phe Ala Glu Pro Pro Cys Lys Ala Ser Pro Gly

85

Trp Gly Pro Pro Ser Arg Gly Pro Gln Gly Asp Arg Ser Gln Gly Glu
100 105 110

Trp Leu Pro Ala Leu Gly Thr Pro Cys Gly Gly Pro Asp Asp Ser 115 120 125

<210> 877

<211> 66

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 877

Met Ala Gly Gln Phe Arg Ser Tyr Val Trp Asp Pro Leu Leu Ile Leu 1 5 10 15

Ser Gln Ile Val Leu Met Gln Thr Val Tyr Tyr Gly Ser Leu Gly Leu 20 25 30

Trp Leu Ala Leu Val Asp Gly Leu Val Arg Xaa Ala Pro Arg Trp Thr 35 . 40

Arg Cys Ser Thr Pro Arg Ser Trp Ala Phe Pro Pro Leu Gln Ala Gly 50 55 60

Ser Pro 65

<210> 878

<211> 124

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 878

Thr Gln Ile Pro Thr His Ile Ser Arg Tyr Thr Pro Leu His Ser Ser 1 5 10 15

Leu Gly Asn Arg Ala Arg Leu Arg Leu Lys Lys Xaa Lys Ile Lys Tyr
20 25 30

Ala Tyr Leu Cys Pro Pro Ser Leu Lys Gln Leu Leu Asn Tyr Ala Val 35 40 45

Ile Asn Gly Leu Ser Ser Ala Asn Tyr Phe Cys Leu Tyr Thr Lys Val 50 55 60

Pro Gln Ala Met Leu Leu Leu Ala Ser Gly Leu Ser Ser Ala Phe Pro 65 70 75 80

Tyr Asp Ser Leu Gly Phe Thr Leu Ser Met Leu Leu Phe Phe Glu Arg 85 90 95

Asn Lys Ser Arg Val Glu Val Leu Ala Lys Glu Pro Ser Ala Pro Ser 100 105 110

Ser Tyr Trp Asp Ser Glu Asn Arg Gly Cys Gln Leu 115 120

<210> 879

<211> 39

<212> PRT

<213> Homo sapiens

<400> 879

Met Ala Gly Gln Phe Arg Ser Tyr Val Trp Asp Pro Leu Leu Ile Leu 1 5 10 15

Ser Gln Ser Ser Cys Arg Pro Cys Ile Thr Ala Arg Trp Ala Cys 20 25 30

Gly Trp Arg Trp Trp Thr Gly 35

<210> 880

<211> 67

<212> PRT

<213> Homo sapiens

<400> 880

Met Ser Leu Cys Arg Ile Leu Gly Tyr Ser Phe Ser Ser Arg Leu Ser 1 5 10 15

Ser Leu Ile Leu Pro Leu Ala Val Phe His Tyr Cys Leu Ser Cys Pro 20 . 25 30 .

Leu His Phe Lys Leu Ser Phe Lys Tyr Leu Pro Phe Pro Ser Phe Pro 35 40 45

Phe Ser Ser Leu Pro Cys Pro Ala Leu Pro Cys Pro Ala Leu Pro Ser 50 55 60

Pro Pro Leu 65

<210> 881

<211> 86

<1112> PRT

<213> Homo sapiens

<400> 881

Met Ser Leu Cys Arg Ile Leu Gly Tyr Ser Phe Ser Ser Arg Leu Ser 1 5 10 15

Ser Leu Ile Leu Pro Leu Ala Val Phe His Tyr Cys Leu Ser Cys Pro 20 25 30

Leu His Phe Lys Leu Ser Phe Lys Tyr Leu Pro Phe Pro Ser Phe Pro 35 40 45

Phe Ser Ser Leu Pro Cys Pro Ala Leu Pro Cys Pro Ala Leu Pro Ser 50 55 60

Pro Pro Leu Pro Cys Pro Pro Leu Pro Ser Pro Pro Leu Pro Leu Pro 65 70 75 80

Ser Leu Ser Phe Phe Arg

<210> 882

<211> 55

<212> PRT

<213> Homo sapiens

<400> 882

Met Cys Val Gly Leu Phe Leu Ser Ser Val Phe Phe His Ile Cys Val 1 5. 10 15

His Pro Phe Ala Asn Ala Thr Leu Ser Cys Leu Leu Glu Ile Gly Lys
20 25 30

Leu Cys Glu Ser Phe Asn Phe Val Leu Phe Gln Ile Val Leu Ala Ile 35 40 - 45

Leu Val Pro Leu Thr Phe Ile
50 55

<210> 883

<211> 73

<212> PRT

<213> Homo sapiens

<400> 883

Thr Leu Phe Val Ser Tyr Gln Leu Ser Asn Pro Gln Tyr Ser Ser Phe

1 5 10 15

Ile Ser Gln Asn Arg Lys Leu Lys Gln Arg Glu Glu Lys Leu His Glu
20 25 30

Arg Phe Tyr Thr Ala Val Arg Ser Leu Asn Trp Ile Leu Asn Leu Ala 35 40 45

Phe Trp Leu Glu Ser Pro Ser Phe Tyr Gln Leu Cys Ile Ala Val Arg 50 55 60

Val Asp Ser Pro Trp Lys Gly Lys Ser
65 70

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<210> 884
<211> 48
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 884
Met Lys Pro Pro Pro Leu Phe Phe Phe Leu Lys Ile Val Leu Xaa Ile
Trp Gly Pro Leu Trp Phe His Met Asn Phe Arg Phe Xaa Phe Ser Ile
Ser Met Lys Asn Ala Ile Gly Ile Leu Ile Gly Ile Ala Leu Asn Leu
                             40
<210> 885
<211> 48
<212> PRT
<213> Homo sapiens
<400> 885
Met Lys Pro Pro Pro Leu Phe Phe Leu Lys Ile Val Leu Ala Ile
                                    10
Trp Gly Pro Leu Trp Phe His Met Asn Phe Arg Phe Val Phe Ser Ile
```

Ser Met Lys Asn Ala Ile Gly Ile Leu Ile Gly Ile Ala Leu Asn Leu 35 40 45

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<210> 886
<211> 214
<212> PRT
<213> Hemo sapiens
<220>
<221> SITE
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<222> (199)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (206)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<231> SITE

<222> (214)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 886

Met Leu Gly Ala Arg Ala Trp Leu Gly Arg Val Leu Leu Leu Pro Arg
1 5 10 15

Ala Gly Ala Gly Leu Ala Ala Ser Arg Arg Cys Pro Gly Val Trp Pro 20 25 30

Lys Asp Arg Ser Ala Thr Val Ser Ser Ser Val Pro Met Pro Ala Gly 50 55 60

Gly Lys Gly Ser His Pro Ser Ser Thr Pro Gln Arg Val Pro Asn Arg 65 70 75 80

Leu Ile His Glu Lys Ser Pro Tyr Leu Leu Gln His Ala Tyr Asn Pro 85 90 95

Val Asp Trp Tyr Pro Trp Gly Gln Glu Ala Phe Asp Lys Ala Arg Lys 100 105 110

Glu Asn Lys Pro Ile Phe Leu Ser Val Gly Tyr Ser Thr Cys His Trp 115 120 125

Cys His Met Met Glu Glu Glu Ser Phe Gln Asn Glu Glu Ile Gly Arg 130 135 140

Leu Leu Ser Glu Asp Phe Val Ser Val Lys Val Asp Arg Glu Glu Arg 145 150 155 160

Pro Asp Val Asp Lys Val Tyr Met Thr Phe Val Gln Ala Thr Ser Ser 165 170 175

Gly Gly Gly Trp Pro Met Asn Val Trp Leu Thr Pro Asn Leu Gln Pro 180 185 190

Phe Val Gly Gly Thr Ile Xaa Leu Leu Lys Asp Gly Leu Xaa Arg Val

Gly Ser Ala Gln Cys Xaa 210

<210> 887

<211> 43

<212> PRT

<213> Homo sapiens

<400> 887

Met Leu Gly Ala Arg Ala Trp Leu Gly Arg Val Leu Leu Leu Pro Arg
1 5 10 15

Ala Gly Ala Gly Leu Ala Ala Ser Arg Arg Ser Ala Cys Ser Pro Thr 20 25 30

Ser Arg Leu Asn Ser Leu Arg Ser Leu Ile Pro 35

<210> 888

<211> 802

<212> PRT

<213> Homo sapiens

<400> 888

Met Leu Gly Ala Arg Ala Trp Leu Gly Arg Val Leu Leu Leu Pro Arg

1 10 15

Ala Gly Ala Gly Leu Ala Ala Ser Arg Arg Cys Pro Gly Val Trp Pro 20 25 30

Arg Thr Trp Pro His Arg Ser Pro Ser Arg Gly Ser Ser Ser Arg Asp 35 40 45

Lys Asp Arg Ser Ala Thr Val Ser Ser Ser Val Pro Met Pro Ala Gly 50 55 60

Gly Lys Gly Ser His Pro Ser Ser Thr Pro Gln Arg Val Pro Asn Arg 65 70 75 80

Leu Ile His Glu Lys Ser Pro Tyr Leu Leu Gln His Ala Tyr Asn Pro  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Val Asp Trp Tyr Pro Trp Gly Gln Glu Ala Phe Asp Lys Ala Arg Lys
100 105 110

Glu Asn Lys Pro Ile Phe Leu Ser Val Gly Tyr Ser Thr Cys His Trp 115 120 125

Cys His Met Met Glu Glu Glu Ser Phe Gln Asn Glu Glu Ile Gly Arg 130 135 140

Leu Leu Ser Glu Asp Phe Val Ser Val Lys Val Asp Arg Glu Glu Arg 145 150 155 160

Pro Asp Val Asp Lys Val Tyr Met Thr Phe Val Gln Ala Thr Ser Ser 165 170 175

Gly Gly Gly Trp Pro Met Asn Val Trp Leu Thr Pro Asn Leu Gln Pro
180 185 190

Phe Val Gly Gly Thr Tyr Phe Pro Pro Glu Asp Gly Leu Thr Arg Val 195 200 205

Gly Phe Arg Thr Val Leu Leu Arg Ile Arg Glu Gln Trp Lys Gln Asn 215 Lys Asn Thr Leu Leu Glu Asn Ser Gln Arg Val Thr Thr Ala Leu Leu 230 Ala Arg Ser Glu Ile Ser Val Gly Asp Arg Gln Leu Pro Pro Ser Ala 250 Ala Thr Val Asn Asn Arg Cys Phe Gln Gln Leu Asp Glu Gly Tyr Asp 265 Glu Glu Tyr Gly Gly Phe Ala Glu Ala Pro Lys Phe Pro Thr Pro Val 280 Ile Leu Ser Phe Leu Phe Ser Tyr Trp Leu Ser His Arg Leu Thr Gln 295 Asp Gly Ser Arg Ala Gln Gln Met Ala Leu His Thr Leu Lys Met Met 310 315 Ala Asn Gly Gly Ile Arg Asp His Val Gly Gln Gly Phe His Arg Tyr Ser Thr Asp Arg Gln Trp His Val Pro His Phe Glu Lys Met Leu Tyr 345 Asp Gln Ala Gln Leu Ala Val Ala Tyr Ser Gln Ala Phe Gln Leu Ser 360 Gly Asp Glu Phe Tyr Ser Asp Val Ala Lys Gly Ile Leu Gln Tyr Val 375 Ala Arg Ser Leu Ser His Arg Ser Gly Gly Phe Tyr Ser Ala Glu Asp Ala Asp Ser Pro Pro Glu Arg Gly Gln Arg Pro Lys Glu Gly Ala Tyr Tyr Val Trp Thr Val Lys Glu Val Gln Gln Leu Leu Pro Glu Pro Val Leu Gly Ala Thr Glu Pro Leu Thr Ser Gly Gln Leu Leu Met Lys His Tyr Gly Leu Thr Glu Ala Gly Asn Ile Ser Pro Ser Gln Asp Pro Lys Gly Glu Leu Gln Gly Gln Asn Val Leu Thr Val Arg Tyr Ser Leu-Glu 470 Leu Thr Ala Ala Arg Phe Gly Leu Asp Val Glu Ala Val Arg Thr Leu Leu Asn Ser Gly Leu Glu Lys Leu Phe Gln Ala Arg Lys His Arg Pro 505 Lys Pro His Leu Asp Ser Lys Met Leu Ala Ala Trp Asn Gly Leu Met 515 520

Val Ser Gly Tyr Ala Val Thr Gly Ala Val Leu Gly Gln Asp Arg Leu 535 Ile Asn Tyr Ala Thr Asn Gly Ala Lys Phe Leu Lys Arg His Met Phe Asp Val Ala Ser Gly Arg Leu Met Arg Thr Cys Tyr Thr Gly Pro Gly 570 Gly Thr Val Glu His Ser Asn Pro Pro Cys Trp Gly Phe Leu Glu Asp 580 585 Tyr Ala Phe Val Val Arg Gly Leu Leu Asp Leu Tyr Glu Ala Ser Gln Glu Ser Ala Trp Leu Glu Trp Ala Leu Arg Leu Gln Asp Thr Gln Asp Arg Leu Phe Trp Asp Ser Gln Gly Gly Gly Tyr Phe Cys Ser Glu Ala Glu Leu Gly Ala Gly Leu Pro Leu Arg Leu Lys Asp Asp Gln Asp Gly Ala Glu Pro Ser Ala Asn Ser Val Ser Ala His Asn Leu Leu Arg Leu 665 His Gly Phe Thr Gly His Lys Asp Trp Met Asp Lys Cys Val Cys Leu 680

Leu Thr Ala Phe Ser Glu Arg Met Arg Arg Val Pro Val Ala Leu Pro 690 695 700

Glu Met Val Arg Ala Leu Ser Ala Gln Gln Gln Thr Leu Lys Gln Ile 705 710 715 720

Val Ile Cys Gly Asp Arg Gln Ala Lys Asp Thr Lys Ala Leu Val Gln 725 730 735

Cys Val His Ser Val Tyr Ile Pro Asn Lys Val Leu Ile Leu Ala Asp  $740 \hspace{1.5cm} 760 \hspace{1.5cm} 760$ 

Gly Asp Pro Ser Ser Phe Leu Ser Arg Gln Leu Pro Phe Leu Ser Thr  $755 \hspace{1.5cm} 760 \hspace{1.5cm} 765$ 

Leu Arg Arg Leu Glu Asp Gln Ala Thr Ala Tyr Val Cys Glu Asn Gln 770 775 780

Ala Cys Ser Val Pro Ile Thr Asp Pro Cys Glu Leu Arg Lys Leu 785 790 795 800

His Pro

<210> 889

<211> 98

<212> PRT

<213> Homo sapiens

<400> 889

Met His Cys Cys Gln Leu Pro Trp Arg Cys Ala Gln Ala Pro Gln Glu
1 5 10 15

Ala Phe Leu Cys Leu Leu Phe Leu Ile Leu Val Leu Val Leu Leu 20 25 30

Gly Cys Ser Arg Gly Leu Pro Gly His Thr Pro Trp Arg Leu His Pro 35 40 45

Ala Ala Ala Leu Leu Ala Pro Leu Leu His Asp Ala Leu Gly Ala 50 55 60

Cys Gly Phe Gln Gly Pro Glu Tyr Leu Leu Pro Cys Leu Leu Pro Leu 65 70 75 80

Pro Lys Pro Gly Gln Leu Gln Gly Pro Trp Gly Pro Leu Trp Ala Leu 85 90 95

Leu Pro

<210> 890

<211> 25

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 890

Cys Ala Val Arg Phe Arg Glu Gln Xaa Ala Pro Glu Arg Val Phe Leu 1 5 10 15

Pro Thr Arg Gly Arg Lys Ser Glu Pro 20 25

<210> 891

<211> 22

<212> PRT

<213> Homo sapiens

<400> 891

Leu Pro Arg Pro Cys Ala Pro Ser Pro Val Trp Arg Gln Val Gly Arg

1 5 10 15

Glu Glu Ala Ser Leu Leu

20

<210> 892

<211> 98

<212> PRT

<213> Homo sapiens

<400> 892

Met His Cys Cys Gln Leu Pro Trp Arg Cys Ala Gln Ala Pro Gln Glu
1 5 10 15

Ala Phe Leu Leu Cys Leu Leu Phe Leu Ile Leu Val Leu Leu 20 25 30

Gly Cys Ser Arg Gly Leu Pro Gly His Thr Pro Trp Arg Leu His Pro 35 40 45

Ala Ala Ala Leu Leu Ala Pro Leu Leu His Asp Ala Leu Gly Ala 50 55 60

Cys Gly Phe Gln Gly Pro Glu Tyr Leu Leu Pro Cys Leu Leu Pro Leu 65 70 75 80

Pro Lys Pro Gly Gln Leu Gln Gly Pro Trp Gly Pro Leu Trp Ala Leu 85 90 95

Leu Pro

<210> 893

<211> 99

<212> PRT

<213> Homo sapiens

<400> 893

Ser Lys Ser Asn Pro Lys Pro Arg Cys Gln Lys Gly Thr Pro Trp Val 1 5 10 15

Ile Arg Pro His Phe His Ser Asp Gly Val Ala Ser Ser Lys Thr Gly 20 25 30

Leu Thr Val Phe Gln Met Ser Gly Leu Gln Ala Pro Ile Pro Ser Arg 35 40 45

Cys Ser Ala Ala Ala Leu Ile Leu Arg Gly Gly Leu Pro Cys Thr Pro 50 60

Leu Glu Ala Phe His Trp Gly Asn Cys Leu Pro Gly Ser Ala Leu Arg 65 70 75 80

Ile Arg Ile Ala Lys Ala Gly Gln Ser Leu Pro Gln Gly Cys Ser Thr
85 90 95

Gly Gln Ala

<310> 894

<311> 83

<012> PET

<013> Homo sapiens

<400> 894

Met Lys Pro Ala Thr Ala Ser Ala Leu Leu Leu Leu Leu Gly Leu
1 5 10 15

Ala Trp Thr Gln Gly Ser His Gly Trp Gly Ala Asp Ala Ser Ser Leu 20 25 30

Gln Lys Arg Ala Gly Arg Ala Asp Gln Val Ser Leu Cys Pro Gln Val
35 40 45

Thr Leu Gln Gly Pro Trp Ser Pro Leu Ala Leu Leu Pro Gly Leu Gly 50 55 60

Asn Leu Lys Phe Ser Phe Thr Pro Pro Phe Asn Gly Phe Leu Ser Arg 65 70 75 80

Val Gln Asp Gly Arg Arg Trp Gln Leu 85

<210> 895

<211> 73

<212> PRT

<213> Homo sapiens

<400> 895

Met Ala Gly Asn Ile Gln Ala Val Glu Thr Gly Tyr Val Leu Ile Cys 1 5 10 15

Leu Ile Val Pro Leu Leu Cys Gly Leu Arg Glu Gly Gln Glu Val 20 25 30

Pro Phe Asp Val Asn Lys Ala Lys Tyr Leu Pro Thr Phe Leu Lys Lys 35 40 45

Lys Lys Lys Lys Lys Lys Lys Ile 65 70

<210> 896

<211> 72

<212> PRT

<213> Homo sapiens

<400> 896

Met Ala Gly Asn Ile Gln Ala Val Glu Thr Gly Tyr Val Leu Ile Cys
1 5 10 15

Leu Ile Val Pro Leu Leu Cys Gly Leu Arg Glu Gly Gln Glu Val 20 25 30

Pro Phe Asp Val Asn Lys Ala Lys Tyr Leu Pro Thr Phe Leu Lys Lys 35 40 45

Lys Lys Lys Lys Lys Lys Lys Lys 65 70

<210> 897

<211> 29

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 897

Met Tyr Val Trp Val Ser Gly Ala Leu Val Leu Val Leu Ser Pro His 1 5 10 15

Pro Ala Ser Arg Thr Leu Cys Leu Met Xaa Gln Ala Xaa 20 25

<210> 898

<211> 80

<212> PRT

<213> Homo sapiens

<400> 898

Pro His Cys Ala Ser Arg Ala Val Pro Tyr Pro Pro Gly Pro Ala Ala 1 5 10 15

Ala Ala Phe Pro Arg Gln Gly Leu Gln Leu Ala Thr Thr Cys Gly His  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Ser Ser Asp Pro Ala Cys Phe Gly Gln Cys Pro Cys His Leu Cys Ala 35 40 45

Asn His Pro Gly Tyr Leu Trp Ser Tyr Arg Val His Leu Ser Pro Gln 50 55 60

Pro His Leu His Pro Pro Gln His Leu Leu Pro Pro His Cys Thr Leu 65 70 75 80

<210> 899

<211> 29

<212> PRT

<213> Homo sapiens

<400> 899

Met Tyr Val Trp Val Ser Gly Ala Leu Val Leu Val Leu Ser Pro His 1 5 10 15

Pro Ala Ser Arg Thr Leu Cys Leu Met Ala Gln Ala Val 20 25

<210> 900

<211> 53

<212> PRT

<213> Homo sapiens

<400> 900

Met Arg Ile Pro Val Phe Pro Lys Gln Leu Met Phe Thr Gly Leu Val 1 5 10 15

Phe Leu Leu Leu Ser Lys Asp Glu Gly Ile His Asn Arg Leu Ser 20 25 30

Leu Glu Asn Thr Asn Asp Gly Gln Leu Phe Gly Val Ile Asn Glu Leu 35 40 45

Ala Thr Thr Leu Met 50

<210> 901

<211> 46

<212> PRT

<213> Homo sapiens

<400> 901

Met Arg Ile Pro Val Phe Pro Lys Gln Leu Met Phe Thr Gly Leu Val 1 5 10 15

Phe Leu Leu Leu Ser Lys Asp Glu Gly Ile His Asn Arg Leu Ser 20 25 30

Leu Glu Asn Thr Asn Asp Gly Gln Leu Phe Gly Val Ile Lys
35 40 45

<210> 902

<211> 19

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 902

Met Pro Phe Thr Leu Gly Xaa Thr Arg Arg Xaa Arg Gly Leu Ala Lys

1 10 15

Lys Pro Lys

<210> 903

<211> 531

<212> PRT

<213> Homo sapiens

<400> 903

Met Leu Cys Ala Leu Leu Leu Leu Pro Ser Leu Leu Gly Ala Thr Arg
1 5 10 15

Ala Ser Pro Thr Ser Gly Pro Gln Glu Cys Ala Lys Gly Ser Thr Val 20 25 30

Trp Cys Gln Asp Leu Gln Thr Ala Ala Arg Cys Gly Ala Val Gly Tyr 35 40 45

Cys Gln Gly Ala Val Trp Asn Lys Pro Thr Ala Lys Ser Leu Pro Cys 50 60

Asp Val Cys Gln Asp Ile Ala Ala Ala Ala Gly Asn Gly Leu Asn Pro 65 70 75 80

Asp Ala Thr Glu Ser Asp Ile Leu Ala Leu Val Met Lys Thr Cys Glu 85 90 95

Trp Leu Pro Ser Gln Glu Ser Ser Ala Gly Cys Lys Trp Met Val Asp 100 105 110

Ala His Ser Ser Ala Ile Leu Ser Met Leu Arg Gly Ala Pro Asp Ser 115 120 125

Ala Pro Ala Gln Val Cys Thr Ala Leu Ser Leu Cys Glu Pro Leu Gln 130 135 140

Arg His Leu Ala Thr Leu Arg Pro Leu Ser Lys Glu Asp Thr Phe Glu 145 150 155 160

Ala Val Ala Pro Phe Met Ala Asn Gly Pro Leu Thr Phe His Pro Arg 165 170 175

Gln Ala Pro Glu Gly Ala Leu Cys Gln Asp Cys Val Arg Gln Val Ser 180 185 190

Arg Leu Gln Glu Ala Val Arg Ser Asn Leu Thr Leu Ala Asp Leu Asn 195 200 205

Ile Gln Glu Gln Cys Glu Ser Leu Gly Pro Gly Leu Ala Val Leu Cys
210 220

Lys 225	Asn	Tyr	Leu	Phe	Gln 230	Phe	Phe	Val	Pro	Ala 235	Asp	Gln	Ala	Leu	Arg 240
Leu	Leu	Pro	Pro	Gln 245	Glu	Leu	Cys	Arg	Lys 250	Gly	Gly	Phe	Cys	Glu 255	Glu
Leu	Gly	Ala	Pro 260	Ala	Arg	Leu	Thr	Gln 265	Val	Val	Ala	Met	Asp 270	Gly	Val
Pro	Ser	Leu 275	Glu	Leu	Gly	Leu	Pro 280	Arg	Lys	Gln	Ser	Glu 285	Met	Gln	Met
Lys	Ala 290	Gly	Val	Thr	Суз	G1u 295	Val	Суз	Met	Asn	Val 300	Val	Gln	Lys	Leu
Asp 305	His	Trp	Leu	Met	Ser 310	Asn	Ser	Ser	Glu	Leu 315	Met	Ile	Thr	His	Ala 320
Leu	Glu	Arg	Val	Cys 325	Ser	Val	Met	Pro	Ala 330	Ser	Ile	Thr	Lys	Glu 335	Cys
Ile	Ile	Leu	Val 340	Asp	Thr	Tyr	Ser	Pro 345	Ser	Leu	Val	Gln	Leu 350	Val	Ala
Lys	Ile	Thr 355	Pro	Glu	Lys	Val	Cys 360	Lys	Phe	Ile	Arg	Leu 365		Gly	Asn
Arg	Arg 370	Arg	Ala	Arg	Ala	Val 375	His	Asp	Ala	Tyr	Ala 380	Ile	Val	Pro	Ser
Pro 385	Glu	Trp	Asp	Ala	Glu 390	Asn	Gln	Gly	Ser	Phe 395	Cys	Asn	Gly	Cys	Lys 400
			Thr	405					410					415	
			Leu 420					425					430		
		435	Ile				440					445			
	450		Ser			455					460				
465			Ala		470					475					480
			Leu	485	1				490					495	
			Thr 500					505					510		
		515	Thr	Leu	Gly	Asn	Thr 520	Arg	Asp	Arg	Gly	Cys 525	Gln	Arg	Pro
Arg	Ala	Суѕ													

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<210> 904
<211> 498
<212> PRT
<213> Homo sapiens
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<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<000>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (398)
<223> Xaa equals any of the naturally occurring L-amino acids
Glu Ala Leu Gly Gly Arg Cys Leu Trp Glu Xaa Pro Val Thr Phe Thr
Val His Phe Xaa Asp Asn Ser Gly Asp Val Phe His Ala His Ser Ser
Val Leu Asn Phe Ala Thr Asn Arg Asp Asp Phe Val Gln Ile Gly Lys
Gly Pro Thr Asn Asn Thr Cys Val Val Arg Thr Val Ser Val Gly Leu
Thr Leu Leu Arg Val Trp Asp Ala Glu His Pro Gly Leu Ser Asp Phe
Met Pro Leu Pro Val Leu Gln Ala Ile Ser Pro Glu Leu Ser Gly Ala
                                     90
Met Val Val Gly Asp Val Leu Cys Leu Ala Thr Val Leu Thr Ser Leu
            100
                                105
Glu Gly Leu Ser Gly Thr Trp Ser Ser Ser Ala Asn Ser Ile Leu His
                            120
Ile Asp Pro Lys Thr Gly Val Ala Val Ala Arg Ala Val Gly Ser Val
    130
                        135
Thr Val Tyr Tyr Glu Val Ala Gly His Leu Arg Thr Tyr Lys Glu Val
                    150
                                        155
Val Val Ser Val Pro Gln Arg Ile Met Ala Arg His Leu His Pro Ile
                                   170
Gln Thr Ser Phe Gln Glu Ala Thr Ala Ser Lys Val Ile Val Ala Val
            180
                                185
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Gly	Asp	Arg 195	Ser	Ser	Asn	Leu	Arg 200	Gly	Glu	Cys	Thr	Pro 205	Thr	Gln	Arg
Glu	Val 210	Ile	Gln	Ala -	Leu	His 215	Pro	Glu	Thr	Leu	Ile 220	Ser	Cys	Gln	Ser
Gln 225	Phe	Lys	Pro	Ala	Val 230	Phe	Asp	Phe	Pro	Ser 235	Gln	Asp	Val	Phe	Thr 240
Val	Glu	Pro	Gln	Phe 245	Asp	Thr	Ala	Leu	Gly 250	Gln	Tyr	Phe	Cys	Ser 255	Ile
Thr	Met	His	Arg 260	Leu	Thr	Asp	Lys	Gln 265	Arg	Lys	His	Leu	Ser 270	Met	Lys
Lys	Thr	Ala 275	Leu	Val	Val	Ser	Ala 280	Ser	Leu	Ser	Ser	Ser 285	His	Phe	Ser
Thr	Glu 290	Gln	Val	Gly	Ala	Glu 295	Val	Pro	Phe	Ser	Pro 300	Gly	Leu	Phe	Ala
Asp 305	Gln	Ala	Glu	Ile	Leu 310	Leu	Ser	Asn	His	Tyr 315	Thr	Ser	Ser	Glu	Ile 320
Arg	Val	Phe	Gly	Ala 325	Pro	Glu	Val	Leu	Glu 330	Asn	Leu	Glu	Val	Lys 335	Ser
Gly	Ser	Pro	Ala 340	Val	Leu	Ala	Phe	Ala 345	Lys	Glu	Lys	Ser	Phe 350	Gly	Trp
Pro	Ser	Phe 355	Ile	Thr	Tyr	Thr	Val 360	Gly	Val	Leu	Asp	Pro 365	Ala	Ala	Gly
Ser	Gln 370	Gly	Pro	Leu	Ser	Thr 375	Thr	Leu	Thr	Phe	Ser 380	Ser	Pro	Val	Thr
Asn 385	Gln	Ala	Ile	Ala	Ile 390	Pro	Val	Thr	Val _	Ala 395	Phe	Val	Xaa	Asp	Arg 400
Arg	Gly	Pro	Gly	Pro 405	Tyr	Gly	Ala	Ser	Leu 410	Phe	Gln	His	Phe	Leu 415	Asp
Ser	Tyr	Gln	Val 420	Met	Phe	Phe	Thr	Leu 425	Phe	Ala	Leu	Leu	Ala 430	Gly	Thr
Ala	Val	Met 435	Ile	Ile	Ala	Tyr	His 440	Thr	Val	Cys	Thr	Pro 445	Arg	Asp	Leu
Ala	Val 450	Pro	Ala	Ala	Leu	Thr 455	Pro	Arg	Ala	Ser	Pro 460	Gly	His	Ser	Pro
His 465	Tyr	Phe	Ala	Ala	Ser 470	Ser	Pro	Thr	Ser	Pro 475	Asn	Ala	Leu	Pro	Pro 480
Ala	Arg	Lys	Ala	Ser 485	Pro	Pro	Ser	Gly	Leu 490	Trp	Ser	Pro	Ala	Tyr 495	Ala
Ser	His														

487

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<210> 905
<211> 886
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (871)
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<400> 905
Met Ala Ala Arg Gly Arg Gly Leu Leu Leu Leu Thr Leu Ser Val Leu
Leu Ala Ala Gly Pro Ser Ala Ala Ala Xaa Lys Leu Asn Ile Pro Lys
Val Leu Leu Pro Phe Thr Arg Ala Thr Arg Val Asn Phe Thr Leu Glu
                             40
Ala Ser Glu Gly Cys Tyr Arg Trp Leu Ser Thr Arg Pro Glu Val Ala
                         55
Ser Ile Glu Pro Leu Gly Leu Asp Glu Gln Gln Cys Ser Gln Lys Ala
Val Val Gln Ala Arg Leu Thr Gln Pro Ala Arg Leu Thr Ser Ile Ile
                 85
Phe Ala Glu Asp Ile Thr Thr Gly Gln Val Leu Arg Cys Asp Ala Ile
                                105
Val Asp Leu Ile His Asp Ile Gln Ile Val Ser Thr Thr Arg Glu Leu
       115
Tyr Leu Glu Asp Ser Pro Leu Glu Leu Lys Ile Gln Ala Leu Asp Ser
                        135
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Glu Gly Asn Thr Phe Ser Thr Leu Ala Gly Leu Val Phe Glu Trp Thr 150 155 Ile Val Lys Asp Ser Glu Ala Asp Arg Phe Ser Asp Ser His Asn Ala 165 170 Leu Arg Ile Leu Thr Phe Leu Glu Ser Thr Tyr Ile Pro Pro Ser Tyr Ile Ser Glu Met Glu Lys Ala Ala Lys Gln Gly Asp Thr Ile Leu Val Ser Gly Met Lys Thr Gly Ser Xaa Lys Leu Lys Ala Arg Ile Gln Glu Ala Val Tyr Lys Asn Val Arg Pro Ala Xaa Val Arg Leu Leu Ile Leu 230 235 Glu Asn Ile Leu Leu Asn Pro Ala Tyr Asp Val Tyr Leu Met Val Gly 245 250 Thr Ser Ile His Tyr Lys Val Gln Lys Ile Arg Gln Gly Lys Ile Thr Glu Leu Xaa Met Pro Ser Asp Gln Tyr Glu Leu Gln Leu Gln Asn Ser Ile Pro Gly Pro Glu Gly Asp Pro Thr Arg Pro Val Ala Val Leu Ala 295 Gln Asp Thr Ser Met Val Thr Ala Leu Gln Leu Gly Gln Ser Ser Leu 310 Val Leu Gly His Arg Ser Ile Arg Met Gln Gly Ala Ser Arg Leu Pro Asn Ser Thr Ile Tyr Val Val Glu Pro Gly Tyr Leu Gly Phe Thr Val 345 His Pro Gly Asp Arg Trp Val Leu Glu Thr Gly Arg Leu Tyr Glu Ile Thr Ile Glu Val Phe Asp Lys Phe Ser Asn Lys Val Tyr Val Ser Asp 370 375 Asn Ile Arg Ile Glu Thr Val Leu Pro Ala Glu Phe Phe Glu Val Leu 390 Ser Ser Ser Gln Asn Gly Ser Tyr His Arg Ile Arg Ala Leu Lys Arg Gly Gln Thr Ala Ile Asp Ala Ala Leu Thr Ser Val Val Asp Gln Asp Gly Gly Val His Ile Leu Gln Val Pro Val Trp Asn Gln Gln Glu Val Glu Ile His Ile Pro Ile Thr Leu Tyr Pro Ser Ile Leu Thr Phe Pro 455

Trp 465	Gln	Pro	Lys	Thr	Gly 470	Ala	Tyr	Gln	Tyr	Thr 475	Ile	Arg	Ala	Ніз	Gly 480
Gly	Ser	Gly	Asn	Phe 485	Ser	Trp	Ser	Ser	Ser 490	Ser	His	Leu	Уal	Ala 495	Thr
Val	Thr	Val	Lys 500	Gly	Val	Met	Thr	Thr 505	Gly	Ser	Asp	Ile	Gly 510	Phe	Ser
Val	Ile	Gln 515	Ala	His	Asp	Val	Gln 520	Asn	Pro	Leu	His	Phe 525	Gly	Glu	Met
Lys	Val 530	Tyr	Val	Ile	Glu	Pro 535	His	Ser	Met	Glu	Phe 540	Ala	Pro	Cys	Gln
Val 545	Glu	Ala	Arg	Val	Gly 550	Gln	Ala	Leu	Glu	Leu 555	Pro	Leu	Arg	Ile	Ser 560
Gly	Leu	Met	Pro	Gly 565	Gly	Ala	Ser	Glu	Val 570	Val	Thr	Leu	Ser	Asp 575	Cys
Ser	His	Phe	Asp 580	Leu	Ala	Val	Glu	Val 585	Glu	Asn	Gln	Gly	Val 590	Phe	Gln
Pro	Leu	Pro 595	Gly	Arg	Leu	Pro	Pro 600	Gly	Ser	Glu	His	Cys 605	Ser	Gly	Val
Arg	Val 610	Lys	Ala	Glu	Ala	Gln 615	Gly	Ser	Thr	Thr	Leu 620	Leu	Val	Ser	Tyr
Arg 625	His	Gly	His	Val	His 630	Leu	Ser.	Ala	Lys	Ile 635	Thr	Ile	Ala	Ala	Tyr 640
Leu	Pro	Leu	Lys	Ala 645	Val	Asp	Pro	Ser	Ser 650	Val	Ala	Leu	Val	Thr 655	Leu
Gly	Ser	Ser	Lys 660	Glu	Met	Leu	Phe	Glu 665	Gly	Gly	Pro	Arg	Pro 670	Trp	Ile
Leu	Glu	Pro 675	Ser	Lys	Phe	Phe	Gln 680	Asn	Val	Thr	Ala	Glu 685	Asp	Thr	Asp
Ser	Ile 690	Gly	Leu	Ala	Leu	Phe 695	Ala	Pro	His	Ser	Ser 700	Arg	Asn	Tyr	Gln
Gln 705	His	Trp	Ile	Leu	Val 710	Thr	Cys	Gln	Ala	Leu 715	Gly	Glu	Gln	Val	11e 720
Ala	Leu	Ser	Val	Gly 725	Asn	Lys	Pro	Ser	Leu 730	Thr	Asn	Pro	Phe	Pro 735	Ala
Val	Glu	Pro	Ala 740	Val	Val	Lys	Phe	Val 745	Cys	Ala	Pro	Pro	Ser 750	Arg	Leu
Thr	Leu	Val 755	Pro	Val	Tyr	Thr	Ser 760	Pro	Gln	Leu	Asp	Met 765	Ser	Cys	Pro
Leu	Leu 770	Gln	Gln	Asn	Lys	Gln 775	Val	Val	Pro	Val	Ser 730	Ser	His	Arg	Asn

Pro Leu Leu Asp Leu Ala Ala Tyr Asp Gln Glu Gly Arg Arg Phe Asp 785 790 795 800

Asn Phe Ser Ser Leu Ser Ile Gln Trp Glu Ser Thr Arg Pro Val Leu 805 810 815

Ala Ser Ile Glu Pro Glu Leu Pro Met Gln Leu Val Ser Gln Asp Asp 820 825 830

Glu Ser Gly Gln Lys Lys Leu His Gly Leu Gln Ala Ile Leu Val His 835 840 845

Glu Ala Ser Gly Thr Thr Ala Ser Leu Pro Leu Pro Leu Ala Thr Arg 850 860

Ser Pro Thr Ser Ala Leu Xaa Glu Gln Ser Ser Arg Met Thr Leu Trp 865 870 875 880

Cys Leu Cys Arg Pro Pro 885

<210> 906

<211> 1887

<212> PRT

<213> Homo sapiens

<400> 906

Met Ala Ala Arg Gly Arg Gly Leu Leu Leu Leu Thr Leu Ser Val Leu 1 5 10 15

Leu Ala Ala Gly Pro Ser Ala Ala Ala Ala Lys Leu Asn Ile Pro Lys
20 25 30

Val Leu Leu Pro Phe Thr Arg Ala Thr Arg Val Asn Phe Thr Leu Glu 35 40 45

Ala Ser Glu Gly Cys Tyr Arg Trp Leu Ser Thr Arg Pro Glu Val Ala 50 55 60

Ser Ile Glu Pro Leu Gly Leu Asp Glu Gln Gln Cys Ser Gln Lys Ala
65 70 75 80

Val Val Gln Ala Arg Leu Thr Gln Pro Ala Arg Leu Thr Ser Ile Ile 85 90 95

Phe Ala Glu Asp Ile Thr Thr Gly Gln Val Leu Arg Cys Asp Ala Ile 100 , 105 110

Val Asp Leu Ile His Asp Ile Gln Ile Val Ser Thr Thr Arg Glu Leu 115 120 125

Tyr Leu Glu Asp Ser Pro Leu Glu Leu Lys Ile Gln Ala Leu Asp Ser 130 135 140

Glu Gly Asn Thr Phe Ser Thr Leu Ala Gly Leu Val Phe Glu Trp Thr 145 150 155 160

Ile Val Lys Asp Ser Glu Ala Asp Arg Phe Ser Asp Ser His Asn Ala

				165					170					175	
Leu	Arg	Ile	Leu 180	Thr	Phe	Leu	Glu	Ser 185	Thr	Tyr	Ile	Pro	Pro 190	Ser	Tyr
Ile	Ser	Glu 195	Met	Glu	Lys	Ala	Ala 200	Lys	Gln	Gly	Asp	Thr 205	Ile	Leu	Val
Ser	Gly 210	Met	Lys	Thr	Gly	Ser 215	Ser	Lys	Leu	Lys	Ala 220	Arg	Ile	Gln	Glu
Ala 225	Val	Tyr	Lys	Asn	Val 230	Arg	Pro	Ala	Glu	Val 235	Arg	Leu	Leu	Ile	Leu 240
Glu	Asn	Ile	Leu	Leu 245	Asn	Pro	Ala	Tyr	Asp 250	Val	Tyr	Leu	Met	Val 255	Gly
Thr	Ser	Ile	His 260	Tyr	Lys	Val	Gln	Lys 265	Ile	Arg	Gln	Gly	Lys 270	Ile	Thr
Glu	Leu	Ser 275	Met	Pro	Ser	Asp	Gln 280	Туr	Glu	Leu	Gln	Leu 285	Gln	Asn	Ser
Ile	Pro 290	Gly	Pro	Glu	Gly	Asp 295	Pro	Thr	Arg	Pro	Val 300	Ala	Val	Leu	Ala
Gln 305	Asp	Thr	Ser	Met	Val 310	Thr	Ala	Leu	Gln	Leu 315	Gly	Gln	Ser	Ser	Leu 320
Val	Leu	Gly	His	Arg 325	Ser	Ile	Arg	Met	Gln 330	Gly	Ala	Ser	Arg	Leu 335	Pro
Asn	Ser	Thr	Ile 340		Val	Val	Glu	Pro 345	Gly	Tyr	Leu	Gly	Phe 350	Thr	Val
His	Pro	Gly 355	Asp	Arg	Trp	Val	Leu 360	Glu	Thr	Gly	Arg	Leu 365	Tyr	Glu	Ile
Thr	Ile 370	Glu	Val	Phe	Asp	Lys 375	Phe	Ser		Lys	Val 380	Tyr	Val	Ser	Asp
Asn 385	Ile	Arg	Ile	Glu	Thr 390	Val	Leu	Pro	Ala	Glu 395	Phe	Phe	Glu	Val	Leu 400
Ser	Ser	Ser	Gln	Asn 405	Gly	Ser	Tyr	His	Arg 410	Ile	Arg	Ala	Leu	Lys 415	Arg
Gly	Gln	Thr	Ala 420	Ile	Asp	Ala	Ala	Leu 425	Thr	Ser	Val	Val	Asp 430	Gln	Asp
Gly	Gly	Val 435	His	Ile	Leu	Gln	Val 440	Pro	Val	Trp	Asn	Gln 445	Gln	Glu	Val
Glu	Ile 450	His	Ile	Pro	Ile	Thr 455	Leu	Tyr	Pro	Ser	Ile 460	Leu	Thr	Phe	Pro
Trp 465	Gln	Pro	Lys	Thr	Gly 470	Ala	Tyr	Gln	Tyr	Thr 475	Ile	Arg	Ala	His	Gly 480
Glv	50-	03.4	5 cm	ode	Sar	ממים	202	Sar	C ~ ~	C ~ ~	uia	T OU	7731	3 l a	アト・

	(, <b>1</b> , , ,														C 1/C
				485	-				490					495	
Val	Thr	Val	Lys 500	Gly	Val	Met	Thr	Thr 505	Gly	Ser	Asp	Ile	Gly 510	Phe	Ser
Val	Ile	Gln 515	Ala	His	Asp	Val	Gln 520	Asn	Pro	Leu	His	Phe 525	Gly	Glu	Met
Lys	Val 530	Tyr	Val	Ile	Glu	Pro 535	His	Ser	Met	Glu	Phe 540	Ala	Pro	Cys	Gln
Val 545	Glu	Ala	Arg	Val	Gly 550	Gln	Ala	Leu	Glu	Leu 555	Pro	Leu	Arg	Ile	Ser 560
Gly	Leu	Met	Pro	Gly 565	Gly	Ala	Ser	Glu	Val 570	Val	Thr	Leu	Ser	Asp 575	Суs
Ser	His	Phe	Asp 580	Leu	Ala	Val	Glu	Val 585	Glu	Asn	Gln	Gly	Val 590	Phe	Gln
Pro	Leu	Pro 595	Gly	Arg	Leu	Pro	Pro 600	Gly	Ser	Glu	His	Cys 605	Ser	Gly	Val
Arg	Val 610	Lys	Ala	Glu	Ala	Gln 615	Gly	Ser	Thr	Thr	Leu 620	Leu	Va1	Ser	Tyr
Arg 625	His	Gly	His	Val	His 630	Leu	Ser	Ala	Lys	Ile 635	Thr	Ile	Ala	Ala	Tyr 640
Leu	Pro	Leu	Lys	Ala 645	Val	Asp	Pro	Ser	Ser 650	Val	Ala	Leu	Val	Thr 655	Leu
Gly	Ser	Ser	Lys 660	Glu	Met	Leu	Phe	Glu 665	Gly	Gly	Pro	Arg	Pro 670	Trp	Ile
Leu	Glu	Pro 675	Ser	Lys	Phe	Phe	Gln 680	Asn	Val	Thr	Ala	Glu 685	Asp	Thr	Asp
Ser	Ile 690	Gly	Leu	Ala	Leu	Phe 695	Ala	Pro	His	Ser	Ser 700	Arg	Asn	Tyr	Gln
Gln 705	His	Trp	Ile	Leu	Val 710	Thr	Cys	Gln	Ala	Leu 715	Gly	Glu	Gln	Val	Ile 720
Ala	Leu	Ser	Val	Gly 725	Asn	Lys	Pro	Ser	Leu 730	Thr	Asn	Pro	Phe	Pro 735	Ala
Val	Glu	Pro	Ala 740	Val	Val	Lys	Phe	Val 745	Суѕ	Ala	Pro	Pro	Ser	Arg	Leu

Thr Leu Val Pro Val Tyr Thr Ser Pro Gln Leu Asp Met Ser Cys Pro

Leu Leu Gln Gln Asn Lys Gln Val Val Pro Val Ser Ser His Arg Asn

Pro Leu Leu Asp Leu Ala Ala Tyr Asp Gln Glu Gly Arg Arg Phe Asp 795

Asn Phe Ser Ser Leu Ser Ile Gln Trp Glu Ser Thr Arg Pro Val Leu

805 810 815

Ala Ser Ile Glu Pro Glu Leu Pro Met Gln Leu Val Ser Gln Asp Asp 820 825 830

Glu Ser Gly Gln Lys Lys Leu His Gly Leu Gln Ala Ile Leu Val His 835 840 845

Glu Ala Ser Gly Thr Thr Ala Ile Thr Ala Thr Ala Thr Gly Tyr Gln 850 855 860

Glu Ser His Leu Ser Ser Ala Arg Thr Lys Gln Pro His Asp Pro Leu 865 870 875 880

Val Pro Leu Ser Ala Ser Ile Glu Leu Ile Leu Val Glu Asp Val Arg 885 890 895

Val Ser Pro Glu Glu Val Thr Ile Tyr Asn His Pro Gly Ile Gln Ala 900 905 910

Glu Leu Arg Ile Arg Glu Gly Ser Gly Tyr Phe Phe Leu Asn Thr Ser 915 920 925

Thr Ala Asp Val Val Lys Val Ala Tyr Gln Glu Ala Arg Gly Val Ala 930 935 940

Met Val His Pro Leu Leu Pro Gly Ser Ser Thr Ile Met Ile His Asp 945 950 955 960

Leu Cys Leu Val Phe Pro Ala Pro Ala Lys Ala Val Val Tyr Val Ser 965 970 975

Asp Ile Gln Glu Leu Tyr Ile Arg Val Val Asp Lys Val Glu Ile Gly 980 985 990

Lys Thr Val Lys Ala Tyr Val Arg Val Leu Asp Leu His Lys Lys Pro 995 1000 1005

Phe Leu Ala Lys Tyr Phe Pro Phe Met Asp Leu Lys Leu Arg Ala Ala 1010 1015 1020

Ser Pro Ile Ile Thr Leu Val Ala Leu Asp Glu Ala Leu Asp Asn Tyr 1025 1030 1035 1040

Thr Ile Thr Phe Leu Ile Arg Gly Val Ala Ile Gly Gln Thr Ser Leu 1045 1050 1055

Thr Ala Ser Val Thr Asn Lys Ala Gly Gln Arg Ile Asn Ser Ala Pro 1060 1065 1070

Gln Gln Ile Glu Val Phe Pro Pro Phe Arg Leu Met Pro Arg Lys Val 1075 1080 1085

Thr Leu Leu Ile Gly Ala Thr Met Gln Val Thr Ser Glu Gly Gly Pro 1090 1095 1100

Gln Pro Gln Ser Asn Ile Leu Phe Ser Ile Ser Asn Glu Ser Val Ala 1105 1110 1115 1120

Leu Val Ser Ala Ala Gly Leu Val Gln Gly Leu Ala Ile Gly Asn Gly

1125 1130 1135

Thr Val Ser Gly Leu Val Gln Ala Val Asp Ala Glu Thr Gly Lys Val 1140 1145 1150

Val Ile Ile Ser Gln Asp Leu Val Gln Val Glu Val Leu Leu Arg 1155 1160 1165

Ala Val Arg Ile Arg Ala Pro Ile Met Arg Met Arg Thr Gly Thr Gln 1170 1175 1180

Met Pro Ile Tyr Val Thr Gly Ile Thr Asn His Gln Asn Pro Phe Ser 1185 1190 1195 1200

Phe Gly Asn Ala Val Pro Gly Leu Thr Phe His Trp Ser Val Thr Lys 1205 1210 1215

Arg Asp Val Leu Asp Leu Arg Gly Arg His His Glu Ala Ser Ile Arg 1220 1225 1230

Leu Pro Ser Gln Tyr Asn Phe Ala Met Asn Val Leu Gly Arg Val Lys 1235 1240 1245

Gly Arg Thr Gly Leu Arg Val Val Val Lys Ala Val Asp Pro Thr Ser 1250 1255 1260

Gly Gln Leu Tyr Gly Leu Ala Arg Glu Leu Ser Asp Glu Ile Gln Val 1265 1270 1275 1280

Gln Val Phe Glu Lys Leu Gln Leu Leu Asn Pro Glu Ile Glu Ala Glu 1285 1290 1295

Gln Ile Leu Met Ser Pro Asn Ser Tyr Ile Lys Leu Gln Thr Asn Arg 1300 1305 1310

Asp Gly Ala Ala Ser Leu Ser Tyr Arg Val Leu Asp Gly Pro Glu Lys 1315 1320 1325

Val Pro Val Val His Val Asp Glu Lys Gly Phe Leu Ala Ser Gly Ser 1330 1335 1340

Met Ile Gly Thr Ser Thr Ile Gly Val Ile Ala Gln Glu Pro Phe Gly 1345 1350 1355 1360

Ala Asn Gln Thr Ile  $\,$  Ile Val Ala Val Lys  $\,$  Val Ser Pro Val Ser  $\,$  Tyr  $\,$  1365  $\,$  1370  $\,$  1375

Leu Arg Val Ser Met Ser Pro Val Leu His Thr Gln Asn Lys Glu Ala 1380 1385 1390

Leu Val Ala Val Pro Leu Gly Met Thr Val Thr Phe Thr Val His Phe 1395 1400 1405

His Asp Asn Ser Gly Asp Val Phe His Ala His Ser Ser Val Leu Asn 1410 1420

Phe Ala Thr Asn Arg Asp Asp Phe Val Gln Ile Gly Lys Gly Pro Thr 1425 1430 1435 1440

Asn Asn Thr Cys Val Val Arg Thr Val Ser Val Gly Leu Thr Leu Leu

1445 1450 1455

Arg Val Trp Asp Ala Glu His Pro Gly Leu Ser Asp Phe Met Pro Leu 1460 1465 1470

Pro Val Leu Gln Ala Ile Ser Pro Glu Leu Ser Gly Ala Met Val Val 1475 1480 1485

Gly Asp Val Leu Cys Leu Ala Thr Val Leu Thr Ser Leu Glu Gly Leu 1490 1495 1500

Ser Gly Thr Trp Ser Ser Ser Ala Asn Ser Ile Leu His Ile Asp Pro 1505 1510 1515 1520

Lys Thr Gly Val Ala Val Ala Arg Ala Val Gly Ser Val Thr Val Tyr 1525 1530 1535

Tyr Glu Val Ala Gly His Leu Arg Thr Tyr Lys Glu Val Val Ser 1540 1545 1550

Val Pro Gln Arg Ile Met Ala Arg His Leu His Pro Ile Gln Thr Ser 1555 1560 1565

Phe Gln Glu Ala Thr Ala Ser Lys Val Ile Val Ala Val Gly Asp Arg 1570 1575 1580

Ser Ser Asn Leu Arg Gly Glu Cys Thr Pro Thr Gln Arg Glu Val Ile 1585 1590 1595 1600

Gln Ala Leu His Pro Glu Thr Leu Ile Ser Cys Gln Ser Gln Phe Lys 1605 1610 1615

Pro Ala Val Phe Asp Phe Pro Ser Gln Asp Val Phe Thr Val Glu Pro 1620 1625 1630

Gln Phe Asp Thr Ala Leu Gly Gln Tyr Phe Cys Ser Ile Thr Met His 1635 1640 1645

Arg Leu Thr Asp Lys Gln Arg Lys His Leu Ser Met Lys Lys Thr Ala 1650 1660

Leu Val Val Ser Ala Ser Leu Ser Ser Ser His Phe Ser Thr Glu Gln 1665 1670 1680

Val Gly Ala Glu Val  $\ \,$  Pro Phe Ser Pro Gly Leu Phe Ala Asp Gln  $\ \,$  Ala  $\ \,$  1685  $\ \,$  1690  $\ \,$  1695

Glu Ile Leu Leu Ser Asn His Tyr Thr Ser Ser Glu Ile Arg Val Phe 1700 \$1705 1710

Gly Ala Pro Glu Val Leu Glu Asn Leu Glu Val Lys Ser Gly Ser Pro 1715 1720 1725

Ala Val Leu Ala Phe Ala Lys Glu Lys Ser Phe Gly Trp Pro Ser Phe 1730 1740

Ile Thr Tyr Thr Val Gly Val Leu Asp Pro Ala Ala Gly Ser Gln Gly 1745 1750 1755 1766

Pro Leu Ser Thr Thr Leu Thr Phe Ser Ser Pro Val Thr Ash Gln Ala

1765 1770 1775

Ile Ala Ile Pro Val Thr Val Ala Phe Val Val Asp Arg Arg Gly Pro 1780 1785 1790

Gly Pro Tyr Gly Ala Ser Leu Phe Gln His Phe Leu Asp Ser Tyr Gln 1795 1800 1805

Val Met Phe Phe Thr Leu Phe Ala Leu Leu Ala Gly Thr Ala Val Met 1810 1815 1820

Ile Ile Ala Tyr His Thr Val Cys Thr Pro Arg Asp Leu Ala Val Pro 1825 1830 1835 1840

Ala Ala Leu Thr Pro Arg Ala Ser Pro Gly His Ser Pro His Tyr Phe 1845 1850 1855

Ala Ala Ser Ser Pro Thr Ser Pro Asn Ala Leu Pro Pro Ala Arg Lys 1860 1865 1870

Ala Ser Pro Pro Ser Gly Leu Trp Ser Pro Ala Tyr Ala Ser His 1875 1880 1885

<210> 907

<211> 16

<212> PRT

<213> Homo sapiens

<400> 907

Pro Leu Cys Leu Ala Leu Glu Leu Gly Trp Val Cys Leu Ser Ser Thr 1 5 10 15

<210> 908

<211> 302

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (262)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (279)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (294)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

- <221> SITE
- <222> (295)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 908
- Met Leu Leu Trp Lys Asn Phe Met Tyr Arg Arg Arg Gln Pro Val  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$
- Gln Leu Leu Val Glu Leu Leu Trp Pro Leu Phe Leu Phe Phe Ile Leu 20 25 30
- Val Ala Val Arg His Ser His Pro Pro Leu Glu His His Glu Cys His 35 40 45
- Phe Pro Asn Lys Pro Leu Pro Ser Ala Gly Thr Val Pro Trp Leu Gln 50 55 60
- Gly Leu Ile Cys Asn Val Asn Asn Thr Cys Phe Pro Gln Leu Thr Pro 65 70 75 80
- Gly Glu Glu Pro Gly Arg Leu Ser Asn Phe Asn Asp Ser Leu Val Ser 85 90 95
- Arg Leu Leu Ala Asp Ala Arg Thr Val Leu Gly Gly Ala Ser Ala His 100 105 110
- Arg Thr Leu Ala Gly Leu Gly Lys Leu Ile Ala Thr Leu Arg Ala Ala 115 120 125
- Arg Ser Thr Ala Gln Pro Gln Pro Thr Lys Gln Ser Pro Leu Glu Pro 130 135 140
- Pro Met Leu Asp Val Ala Glu Leu Leu Thr Ser Leu Leu Arg Thr Glu 145 150 155 160
- Ser Leu Gly Leu Ala Leu Gly Gln Ala Gln Glu Pro Leu His Ser Leu 165 170 175
- Leu Glu Ala Ala Glu Asp Leu Ala Gln Glu Leu Leu Ala Leu Arg Ser 180 185 190
- Leu Val Glu Leu Arg Ala Leu Leu Gln Arg Pro Arg Gly Thr Ser Gly 195 200 205
- Pro Leu Glu Leu Ser Glu Ala Leu Cys Ser Val Arg Gly Pro Ser 210 215 220
- Ser Thr Val Gly Pro Ser Leu Asn Trp Tyr Glu Ala Ser Asp Leu Met 225 230 235 240
- Glu Leu Val Gly Gln Glu Pro Glu Ser Ala Cys Arg Gln Gln Leu Ser 245 250 255
- Pro Leu Leu Gly Ala Xaa Trp Ser Leu Asp Ser Thr Arg Cys Pro Leu 260 265 270
- Val Trp Asn Ala Glu Ala Xaa Ser Ser Glu Val Leu Leu Thr Asp His 275 280 285
- Phe Thr Glo Val Met Xaa Xaa Glo Arg Leo Gln Ser Tyr Leo

WO 01/77137

PCT/US01/11988

290

295

300

<210> 909

<211> 37

<212> PRT

<213> Homo sapiens

<400> 909

Leu Pro Trp Leu Pro Phe Phe Phe Ser Cys Leu Val Ser Thr Leu Pro  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ser Met Ser Val Ser Ala Phe Ser Leu Val Val Arg Gly Arg Arg Ala 20 25 . 30

Phe Thr Ser Val Arg 35

<210> 910

<211> 181

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (151) -

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (162)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 910

Pro Lys Thr Ser Pro Ser Pro Glu Val Ser Tyr Thr Thr Pro Ala Pro

1 10 15

Lys Asp Val Leu Leu Pro His Lys Pro Tyr Pro Glu Val Ser Gln Ser 20 25 30

Glu Pro Ala Pro Leu Glu Thr Arg Gly Ile Pro Phe Ile Pro Met Ile 35 40 45

Ser Pro Ser Pro Ser Gln Glu Glu Leu Gln Thr Thr Leu Glu Glu Thr 50 55 60

Asp Gln Ser Thr Gln Glu Pro Phe Thr Thr Lys Ile Pro Arg Thr Xaa 65 70 75 80

Glu Leu Ala Lys Thr Thr Gln Ala Pro His Arg Phe Tyr Thr Thr Val 85 90 95

Arg Pro Arg Thr Ser Asp Lys Pro His Ile Arg Fro Val Leu Asn Arg 100 105 110

Thr Thr Thr Arg Pro Thr Arg Pro Lys Pro Ser Gly Met Pro Ser Gly 115 120 125

Asn Gly Val Gly Thr Gly Val Lys Gln Ala Pro Arg Pro Ser Gly Ala 130 135 140

Asp Arg Asn Val Ser Val Xaa Ser Thr His Pro Thr Lys Lys Pro Gly 145 150 155 160

Thr Xaa Arg Pro Pro Leu Pro Pro Ser Arg Arg Gly Arg Glu Phe Pro 165 170 175

Gly Arg Arg Ala His 180

<210> 911

<211> 161

<212> PRT

<213> Homo sapiens

<400> 911

Met Leu Ser Ser Leu Gly Cys Leu Leu Leu Cys Gly Ser Ile Thr Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ala Leu Gly Asn Ala Gln Lys Leu Pro Lys Gly Lys Arg Pro Asn Leu 20 25 30

Lys Val His Ile Asn Thr Thr Ser Asp Ser Ile Leu Leu Lys Phe Leu 35 40 45

Arg Pro Ser Pro Asn Val Lys Leu Glu Gly Leu Leu Gly Tyr Gly 50 55 60

Ser Asn Val Ser Pro Asn Gln Tyr Phe Pro Leu Pro Ala Glu Gly Lys 65 70 75 80

Phe Thr Glu Ala Ile Val Asp Ala Glu Pro Lys Tyr Leu Ile Val Val 85 90 95

Arg Pro Ala Pro Pro Pro Ser Gln Lys Lys Ser Cys Ser Gly Lys Thr
100 105 110

Arg Ser Arg Lys Pro Leu Gln Leu Val Val Gly Thr Leu Thr Pro Ser 115 120 125

Ser Val Phe Leu Ser Trp Gly Phe Leu Ile Asn Pro His His Asp Trp 130 135 140

Thr Leu Pro Ser His Cys Pro Asn Asp Arg Phe Tyr Thr Ile Arg Tyr 145 150 155 160

Arg

<210> 912

<211> 778

<212> PRT

<213> Homo sapiens

<400> 912

Met Leu Ser Ser Leu Gly Cys Leu Leu Cys Gly Ser Ile Thr Leu 1 5 10 15

Ala Leu Gly Asn Ala Gln Lys Leu Pro Lys Gly Lys Arg Pro Asn Leu 20 25 30

Lys Val His Ile Asn Thr Thr Ser Asp Ser Ile Leu Leu Lys Phe Leu 35 40 45

Arg Pro Ser Pro Asn Val Lys Leu Glu Gly Leu Leu Gly Tyr Gly 50 55 60

Ser Asn Val Ser Pro Asn Gln Tyr Phe Pro Leu Pro Ala Glu Gly Lys
65 70 75 80

Phe Thr Glu Ala Ile Val Asp Ala Glu Pro Lys Tyr Leu Ile Val Val 85 90 95

Arg Pro Ala Pro Pro Pro Ser Gln Lys Lys Ser Cys Ser Gly Lys Thr
100 105 110

Arg Ser Arg Lys Pro Leu Gln Leu Val Val Gly Thr Leu Thr Pro Ser 115 120 125

Ser Val Phe Leu Ser Trp Gly Phe Leu Ile Asn Pro His His Asp Trp 130 135 140

Thr Leu Pro Ser His Cys Pro Asn Asp Arg Phe Tyr Thr Ile Arg Tyr 145 150 155 160

Arg Glu Lys Asp Lys Glu Lys Lys Trp Ile Phe Gln Ile Cys Pro Ala 165 170 175

Thr Glu Thr Ile Val Glu Asn Leu Lys Pro Asn Thr Val Tyr Glu Phe 180 185 190

Gly Val Lys Asp Asn Val Glu Gly Gly Ile Trp Ser Lys Ile Phe Asn 195 200 205

His Lys Thr Val Val Gly Ser Lys Lys Val Asn Gly Lys Ile Gln Ser 210 215 220

Thr Tyr Asp Gln Asp His Thr Val Pro Ala Tyr Val Pro Arg Lys Leu 225 230 235 240

Ile Pro Ile Thr Ile Ile Lys Gln Val Ile Gln Asn Val Thr His Lys
245 250 255

Asp Ser Ala Lys Ser Pro Glu Lys Ala Pro Leu Gly Gly Val Ile Leu 260 265 270

Val His Leu Ile Ile Pro Gly Leu Asn Glu Thr Thr Val Lys Leu Pro 275 280 285

Ala	Ser 290	Leu	Met	Phe	Glu	Ile 295	Ser	Asp	Ala	Leu	19s	Thr	Glm	Leu	Ala
Lys 305	Asn	Glu	Thr	Leu	Ala 310	Leu	Pro	Ala	Glu	Ser 315	Lys	Thr	Pro	Glu	Val 320
Glu	Lys	Ile	Ser	Ala 325	Arg	Pro	Thr	Thr	Val 330	Thr	Pro	Glu	Thr	Val 335	Pro
Arg	Ser	Thr	Lys 340	Pro	Thr	Thr	Ser	Ser 345	Ala	Leu	Asp	Val	Ser 350	Glu	Thr
Thr	Leu	Val 355	Leu	Ser	Lys	Arg	Thr 360	Pro	Glu	Thr	Leu	Gln 365	Thr	Ile	Leu
Ile	Pro 370	Gln	Phe	Glu	Leu	Pro 375	Leu	Ser	Thr	Leu	Ala 380	Pro	Lys	Ser	Leu
Pro 385	Glu	Phe	Pro	Glu	Ala 390	Lys	Thr	Pro	Phe	Pro 395	Phe	Glu	Lys	Pro	Arg 400
Gly	Thr	Leu	Ala	Ser 405	Ser	Glu	Lys	Pro	Trp 410	Ile	Val	Pro	Thr	Ala 415	Lys
Ile	Ser	Glu	Asp 420	Ser	Lys	Val	Leu	Gln 425	Pro	Gln	Thr	Ala	Thr 430	Tyr	Asp
Val	Phe	Ser 435	Ser	Pro	Thr	Thr	Ser 440	Asp	Glu	Pro	Glu	Ile 445	Ser	Asp	Ser
Tyr	Thr 450	Ala	Thr	Ser	Asp	Arg 455	Ile	Leu	Asp	Ser	Ile 460	Pro	Pro	Lys	Thr
Ser 465	Arg	Thr	Leu	Glu	Gln 470	Pro	Arg	Ala	Thr	Leu 475	Ala	Pro	Ser	Glu	Thr 480
Pro	Phe	Val	Pro	G1n 485	Lys	Leu	Glu	Ile	Phe 490	Thr	Ser	Pro	Glu	Met 495	Gln
Pro	Thr	Thr	Pro 500	Ala	Pro	Gln	Gln	Thr 505	Thr	Ser	Ile	Pro	Ser 510	Thr	Pro
Lys	Arg	Arg 515	Pro	Arg	Pro	Lys	Pro 520	Pro	Arg	Thr	Lys	Pro 525	Glu	Arg	Thr
Thr	Ser 530	Ala	Gly	Thr	Ile	Thr 535	Pro	Lys	Ile	Ser	Lys 540	Ser	Pro	Glu	Pro
Thr 545	Trp	Thr	Thr	Pro	Ala 550	Pro	Gly	Lys	Thr	Gln 555	Phe	Ile	Ser	Leu	Lys 560
Pro	lys	Ile	Pro	Leu 565	Ser	Pro	Glu	Val	Thr 570	His	Thr	Lys	Pro	Ala 575	Pro
Ъуs	Gln	Thr	Pro 580	Arg	Ala	Pro	Pro	Lys 585	Pro	Lys	Thr	Ser	Pro 590	Arg	Pro
Arg	Ile	Pro 595	Gln	Thr	Gln	Pro	Val 600	Pro	Lys	Val	Pro	Gln 605	Arg	√al	Thr

Ala Lys Pro Lys Thr Ser Pro Ser Pro Glu Val Ser Tyr Thr Thr Pro 610 615 620

Ala Pro Lys Asp Val Leu Leu Pro His Lys Pro Tyr Pro Glu Val Ser 625 630 635 640

Gln Ser Glu Pro Ala Pro Leu Glu Thr Arg Gly Ile Pro Phe Ile Pro 645 650 655

Met Ile Ser Pro Ser Pro Ser Gln Glu Glu Leu Gln Thr Thr Leu Glu 660 665 670

Glu Thr Asp Gln Ser Thr Gln Glu Pro Phe Thr Thr Lys Ile Pro Arg 675 680 685

Thr Thr Glu Leu Ala Lys Thr Thr Gln Ala Pro His Arg Phe Tyr Thr 690 695 700

Thr Val Arg Pro Arg Thr Ser Asp Lys Pro His Ile Arg Pro Val Leu 705 710 715 720

Asn Arg Thr Thr Arg Pro Thr Arg Pro Lys Pro Ser Gly Met Pro 725 730 735

Ser Gly Asn Gly Val Gly Thr Gly Val Lys Gln Ala Pro Arg Pro Ser 740 745 750

Gly Ala Asp Arg Asn Val Ser Val Asp Ser Thr His Pro Thr Lys Lys  $755 \hspace{1.5cm} 760 \hspace{1.5cm} 765$ 

Pro Gly Thr Arg Arg Pro Pro Leu Pro Pro 770 775

<210> 913

<211> 132

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 913

Ser Phe Arg Thr Ala Pro Arg Gly Pro His Val Lys Glu Ser His Ala 1 5 10 15

Ser Gly Leu Leu Ser Asn Gln Ile Asn Leu Gln Ser Phe Asp Phe Lys 20 25 30

Arg Met Leu Cys Arg Leu Asn Ile Thr Gly Leu Cys Trp Gly Pro
35 40 45

Lys Arg Thr Arg Cys Ala Leu Gly Gly Gln Thr Gly Leu Gln His His 50 55 60

Pro Ser Asn Glu Lys Xaa Arg His Ser Gly Lys Glu Asp Leu Phe Leu

65 70 75 80

Ser Ile Cys Leu Gly Trp Gly Thr Thr Val Asn Met Ala Cys Asn Asn 85 90 95

Gln Arg Gly Arg Gly Tyr Gln Thr Gln Arg Asn Ser Ser Pro Val Tyr
100 105 110

Gln Glu Glu Leu Leu Phe Phe Cys Thr Ser Leu Phe Ser Arg Leu Phe 115 120 125

Ser Leu Lys Gly 130

<210> 914

<211> 33

<212> PRT

<213> Homo sapiens

<400> 914

Met Asn His Leu Ser Ile Ser Ile Ala Leu Phe Leu Leu Cys Cys Val ${\bf 1}$ 

His Leu Ser Leu Gly Leu Ser Val Phe Pro Phe Gln Glu Asp Arg Ser 20 25 30

Val

<210> 915

<211> 102

<212> PRT

<213> Homo sapiens

<400> 915

Met Asn Tyr Leu His Cys Asn Val Leu Leu Thr Leu Phe Cys Leu Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Phe Leu Leu His Ser Cys Ile Lys Ile Lys His His Ser Gln Ala 20 25 30

Lys Arg Thr Arg Phe Pro Ser His Ile Ser His Lys Gly Glu Ala Asn \$35\$ \$40\$

Thr His Gln Gly Gly Asn Tyr Thr Glu Leu Gly Trp Gly Leu Asp Ile 50 60

Tyr Phe Thr Ser Glu Leu Phe Ile Ser Ala Val Asn Leu Gly Glu Gly 65 70 75 80

Leu Gly Glu Val Leu Ser Gly Glu Gln Arg Gly Pro Gly Gly Lys Leu 85 90 95

Met Lys Thr Ser Asp Asp 100

<210> 916

<211> 85

<212> PRT

<213> Homo sapiens

<400> 916

Ile Lys Thr Val Phe Leu Gly Gln Arg Tyr Thr Asp Pro Asn Phe Ile
1 5 10 15

Ala Val Val Phe Ile His Leu Pro Ile Asp Ile Leu Lys Ala Pro Ala 20 25 30.

Arg Pro Gly Thr Val Ala His Ala Cys Asn Leu Ser Thr Leu Val Gly 35 40 45

Arg Gly Gly Arg Ile Thr Arg Ser Arg Asp Gln Asp His Pro Gly Gln 50 55 60

Arg Gly Glu Thr Leu Ser Leu Leu Lys Ile Gln Lys Leu Ala Gly His 65 70 75 80

Gly Gly Ala Arg Leu

<210> 917

<211> 33

<212> PRT

<213> Homo sapiens

<400> 917

Met Ile Ser Cys Leu Cys Asn Phe Ile Ala His Cys Val Ala Leu Val 1 5 10 15

Met Arg Thr Cys Met Leu Val Val Ser Ser Asn Phe Ala Pro Ser Phe 20 25 30

Leu

<210> 918

<211> 33

<212> PRT

<213> Homo sapiens

<400> 918

Met Ile Ser Cys Leu Cys Asn Phe Ile Ala His Cys Val Ala Leu Val 1 5 10 15

Met Arg Thr Cys Met Leu Val Val Ser Ser Asn Phe Ala Pro Ser Phe 20 25 30

Leu

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<210> 919
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<211> 101

<212> PRT

<213> Homo sapiens

<400> 919

Val Asp Pro Arg Val Arg Thr Ser Ser Arg Ser Arg Ala Ala Leu

1 5 10 15

Phe Glu Cys Phe Leu Met Val Phe Leu Leu Lys Cys Gln Val Asn Asn 20 25 30

Phe Asn Pro Ile Gln Gln Tyr Ser Leu Phe Pro Leu Lys Ser Ser Gly 35 40 45

Thr Cys Ser Ile Ser Leu Phe Cys Met Arg Gly Leu Tyr Phe Cys Leu 50 60

Gly Val Val Ile Cys Thr His Ala Ile Leu Leu Lys Pro Ser Cys Leu 65 70 75 80

Val Leu Phe Leu Glu Ser Phe Phe Phe Pro Val Leu Met Tyr Ala Gly 85. 90 95

Phe Gly Asn Ser Ser 100

<210> 920

<211> 60

<212> PRT

<213> Homo sapiens

<400> 920

Met Arg Lys Trp Gly Leu Met Lys Leu Ile Ala Ser Met Met Gln Pro 1 5 10 15

Val Leu Leu Glu Leu Leu Ser Val Trp Arg Lys Glu Gly Arg Asp Ser
20 25 30

Arg Asn Ile His Asp Ser His Ser Met Tyr Val Leu Arg Lys Arg Leu 35 40 45

Ser Gly Ser Trp Leu Gln Gln Val Cys Thr Leu Leu 50 55 60

<210> 921

<211> 79

<212> PRT

<213> Homo sapiens

<400> 921

Met Arg Lys Trp Gly Leu Met Lys Leu Ile Ala Ser Met Met Gln Pro 1 5 17

Val Leu Leu Glu Leu Leu Ser Val Trp Arg Lys Glu Gly Arg Asp Ser 20 25 30

- Arg Asn Ile His Asp Ser His Ser Met Tyr Val Leu Arg Lys Arg Leu 35 40 45
- Ser Gly Ser Trp Leu Gln Ala Gly Leu Tyr Ser Thr Val Ile Ser Ala 50 55 60
- Ala Leu Ile Leu Glu Ser Pro Arg Ala Cys Leu Pro Ser Lys Gly 65 70 75

<210> 922

<211> 245

<212> PRT

<213> Homo sapiens

<400> 922

- Met Ala Asp Val Ser Ala Lys Asp Ser Ser Gln Glu Thr Leu Val Asn 1 5 10 15
- Leu Ala Gly Leu Leu Val Ser Leu Leu Met Leu Pro Leu Val Ser Gly
  20 25 30
- Cys Pro Gly Phe Ser Leu Gly Cys Phe Phe Phe Leu Thr Ala Leu His 35 40 45
- Ile Tyr Ala Asn Tyr Arg Ala Val Arg Ala Leu Val Met Glu Thr Leu 50 55 60
- Asn Glu Gly Arg Leu Arg Leu Val Leu Lys His Tyr Leu Gln Arg Gly 65 70 75 80
- Glu Val Leu Asp Pro Thr Ala Ala Asn Arg Met Glu Pro Leu Trp Thr 85 90 95
- Gly Phe Trp Pro Ala Pro Ser Leu Ser Leu Gly Val Pro Leu His Arg
  100 105 110
- Leu Val Ser Ser Val Phe Glu Leu Gln Gln Leu Val Glu Gly His Gln 115 120 125
- Glu Ser Tyr Leu Leu Cys Trp Asp Gln Ser Gln Asn Gln Val Gln Val
  130 135 140
- Val Leu Asn Gln Lys Ala Gly Pro Lys Thr Ile Leu Arg Ala Ala Thr 145 150 155 160
- His Gly Leu Met Leu Gly Ala Leu Gln Gly Asp Gly Pro Leu Pro Ala 165 170 175
- Glu Leu Glu Glu Leu Arg Asn Arg Val Arg Ala Gly Pro Lys Glu 180 185 190
- Ser Trp Val Val Lys Glu Thr His Glu Val Leu Asp Met Leu Phe
  195 200 205
- Pro Lys Phe Leu Lys Gly Leu Gln Asp Ala Gly Trp Lys Thr Glu Lys

210 215 223

His Gln Leu Glu Val Asp Glu Trp Arg Ala Thr Trp Leu Leu Ser Pro 225 230 235 240

Glu Lys Lys Val Leu 245

<210> 923

<211> 75

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (62)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 923

Leu Pro Val Gln Asn Gly Cys Pro Glu Ser Ala Met Glu Met Asn Gly
1 5 10 15

Arg Ala Pro Cys Trp Glu Val Gly Leu Glu Glu Leu Ser Ser Arg Lys 20 25 30

Leu Thr Ala Gly Pro Gln Phe Pro Ser Glu Pro Gln Ala Pro Ala Pro 35 40 45

Ser Leu Phe Arg Gln Cys Leu Leu Trp Phe Cys Gly Met Xaa Xaa Gly 50 60

Gly Val Gly Ser Pro Pro Pro Leu Thr Gln Glu 65 70 75

<210> 924

<211> 186

<212> PRT

<213> Homo sapiens

<400> 924

Met Leu Pro Leu Val Ser Gly Cys Pro Gly Phe Ser Leu Gly Cys Phe
1 5 10 15

Phe Phe Leu Thr Ala Leu His Ile Tyr Ala Asn Tyr Arg Ala Val Arg 20 25 30

Ala Leu Val Met Glu Thr Leu Asn Glu Gly Arg Leu Arg Leu Val Leu 35 40 45

Lys His Tyr Leu Gln Arg Gly Glu Val Leu Asp Pro Thr Ala Ala Asn 50 55 60

Arg Met Glu Pro Leu Trp Thr Gly Phe Trp Pro Ala Pro Ser Leu Ser 65 70 75 80

Leu Gly Val Pro Leu His Arg Leu Val Ser Ser Val Phe Glu Leu Gln 85 90 95

Gln Leu Val Glu Gly His Gln Glu Ser Tyr Leu Leu Cys Trp Asp Gln 100 105 110

Ser Gln Asn Gln Val Gln Val Leu Asn Gln Lys Ala Gly Pro Lys 115 120 125

Thr Ile Leu Arg Ala Ala Thr His Gly Leu Met Leu Gly Ala Leu Gln 130 135 140

Gly Asp Gly Pro Leu Pro Ala Glu Leu Glu Glu Leu Arg Asn Arg Val 145 150 155 160

Arg Ala Gly Pro Arg Lys Arg Ala Gly Ser Ser Ser Arg Arg His Thr 165 170 175

Lys Cys Trp Thr Cys Cys Ser Gln Ser Ser 180 185

<210> 925

<211> 40

<212> PRT

<213> Homo sapiens

<400> 925

Met Arg Arg Gln Thr Phe Met Ser Ile Leu Val Phe Gln Cys Ser Pro 1 5 10 15

Ile Ser Phe Gly Leu Cys Ile Asn Lys Glu Arg Thr Val Val Ser Ser 20 25 30

Val Ile Thr Asp Asn Leu Cys Leu . 35 40

<210> 926

<211> 40

<212> PRT

<213> Homo sapiens

<400> 926

Met Arg Arg Gln Thr Phe Met Ser Ile Leu Val Phe Gln Cys Ser Pro 1 5 10 15

Ile Ser Phe Gly Leu Cys Ile Asn Lys Glu Arg Thr Val Val Ser Ser

Val Ile Thr Asp Asn Leu Cys Leu 35 40

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<210> 927
<211> 73
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 927
Ser Leu Leu Ser Cys Cys Pro Leu Gly Asn Arg Ala Tyr Gly Ala
                    10
Thr Gly Ala Glu Val Ala Ser Arg Ala Ser Leu Glu Gly Ser Glu His
Ser Met Gln Arg Ser His Arg Glu Ala Gly Asn Gln Gly Pro Gly Arg
                           40
Ala Ala Ser Cys Ala Ser Pro Ala Phe Val Met Xaa Phe Ser Phe Phe
Thr His Cys Gln Ile Cys Phe Leu Pro
                    70
<210> 928
<211> 7
<212> PRT
<213> Homo sapiens
<400> 928
Glu Ala Pro Trp Gln Phe Ser
1 5 .
<210> 929
<211> 23
<212> PRT
<213> Homo sapiens
<400> 929
Met Phe Leu Lys Ala Gln Trp Leu Tyr Ser Leu Leu Leu Asn Cys Leu
                                  10
Leu Pro Glu Gly Thr Ser Ser
            20
<210> 930
<211> 23
<212> PRT
<213> Homo sapiens
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<400> 930

Met Phe Leu Lys Ala Gln Trp Leu Tyr Ser Leu Leu Leu Asn Cys Leu 1 5 10 15

Leu Pro Glu Gly Thr Ser Ser 20

<210> 931

<211> 64

<212> PRT

<213> Homo sapiens

<400> 931

Arg Thr Leu Arg Met Ser Pro Ser Ala Phe Cys Tyr Ser Leu Thr Leu 1 5 10 15

Leu Ala Cys Trp Arg Ala Ala Trp Ile Pro Thr Cys Val Pro Arg Ala 20 25 30

Ala Gly Glu Met Asp Ser Pro Gly Leu Ala Asp Gly His Trp Cys Ser 35 . 40 . 45

Gly Ala Ala Arg Arg Ser Pro His Tyr Val Ala Arg Ser Leu Val Leu 50 55 60

<210> 932

<211> 822

<212> PRT

<213> Homo sapiens

<400> 932

Met Ala Ala Val Val Val Ala Glu Gly Asp Ser Asp Ser Arg Pro

1 5 10 15

Gly Gln Glu Leu Leu Val Ala Trp Asn Thr Val Ser Thr Gly Leu Val 20 25 30

Pro Pro Ala Ala Leu Gly Leu Val Ser Ser Arg Thr Ser Gly Ala Val

Pro Pro Lys Glu Glu Glu Leu Arg Ala Ala Val Glu Val Leu Arg Gly 50 55 60

His Gly Leu His Ser Val Leu Glu Glu Trp Phe Val Glu Val Leu Gln 65 70 75 80

Asn Asp Leu Gln Ala Asn Ile Ser Pro Glu Phe Trp Asn Ala Ile Ser 85 90 95

Gln Cys Glu Asn Ser Ala Asp Glu Pro Gln Cys Leu Leu Leu Leu 100 105 110

Asp Ala Phe Gly Leu Leu Glu Ser Arg Leu Asp Pro Tyr Leu Arg Ser 115 120 125

Leu	130	Leu	Leu	Glu	ГЛЗ	135		Arg	Leu	Gly	Leu 140		Met	Gly	Thr
Gly 145	Ala	Gln	Gly	Leu	Arg 150	Glu	Glu	Val	His	Thr 155	Met	Leu	Arg	Gly	Val 160
Leu	Phe	Phe	Ser	Thr 165	Pro	Arg	Thr	Phe	Gln 170		Met	Ile	Gln	Arg 175	
Tyr	Gly	Суз	Phe 180	Leu	Arg	Val	Tyr	Met 185		Ser	Lys	Arg	Lys 190	Gly	Glu
Gly	Gly	Thr 195	Asp	Pro	Glu	Leu	Glu 200	Gly	Glu	Leu	Asp	Ser 205	Arg	Tyr	Ala
Arg	Arg 210	Arg	Tyr	Tyr	Arg	Leu 215	Leu	Gln	Ser	Pro	Leu 220	Cys	Ala	Gly	Cys
Ser 225	Ser	Asp	Lys	Gln	Gln 230	Cys	Trp	Суѕ	Arg	Gln 235	Ala	Leu	Glu	Gln	Phe 240
His	Gln	Leu	Ser	Gln 245	Val	Leu	His	Arg	Leu 250	Ser	Leu	Leu	Glu	Arg 255	Val
Ser	Ala	Glu	Ala 260	Val	Thr	Thr	Thr	Leu 265	His	Gln	Val	Thr	Arg 270	Glu	Arg
	Glu	275					280					285			
Phe	His 290	Lys	Trp	Ile	Glu	Arg 295	Val	Val	Gly	Trp	Leu 300	Gly	Lys	Va1	Phe
Leu 305	Gln	Asp	Gly	Pro	Ala 310	Arg	Pro	Ala	Ser	Pro 315	Glu	Ala	Gly	Asn	Thr 320
	Arg			325					330					335	
	Ser		340					345					350		
	Ser	355					360					365			
	Gln 370					375					380				
385	Leu				390					395					400
	Ser			405					410					415	
	Glu		420					425					430		
Asp	Thr	Val 435	Arg	Gln	Ile	Val	Ala 440	Gly	Leu	Thr	Gly	Asp 445	Ser	Asp	Gly

Thr	GLY 450	Asp	Leu	Ala	Val	G1u 455	Leu	Ser	Lys	Thr	460	Pro	Ala	Ser	Leu
Glu 465	Thr	Gly	Gln	Asp	Ser 470	Glu	Asp	Asp	Ser	Gly 475	Glu	Pro	Glu	Asp	Trp 480
Val	Pro	Asp	Pro	Val 485	Asp	Ala	Asp	Pro	Gly 490	Lys	Ser	Ser	Ser	Lys 495	Arg
Arg	Ser	Ser	Asp 500	Ile	Ile	Ser	Leu	Leu 505	Val	Ser	Ile	Tyr	Gly 510	Ser	Lys
Asp	Leu	Phe 515	Ile	Asn	Glu	Tyr	Arg 520	Ser	Leu	Leu	Ala	Asp 525	Arg	Leu	Leu
His	Gln 530	Phe	Ser	Phe	Ser	Pro 535	Glu	Arg	Glu	Ile	Arg 540	Asn	Val	Glu	Leu
Leu 545	Lys	Leu	Arg	Phe	Gly 550	Glu	Ala	Pro	Met	His 555	Phe	Суз	Glu	Val	Met 560
Leu	Lys	Asp	Met	Ala 565	Asp	Ser	Arg	Arg	Ile 570	Asn	Ala	Asn	Ile	Arg 575	Glu
Glu	Asp	Glu	Lys 580	Arg	Pro	Ala	Glu.	Glu 585	Gln	Pro	Pro	Phe	Gly 590	Val	Tyr
Ala	Val	Ile 595	Leu	Ser	Ser	Glu	Phe 600	Trp	Pro	Pro	Phe	Lys 605	Asp	Glu	Lys
Leu	Glu 610	Val	Pro	Glu	Asp	Ile 615	Arg	Ala	Ala	Leu	Glu 620	Ala	Tyr	Cys	Lys
Lys 625	Tyr	Glu	Gln	Leu	Lys 630	Ala	Met	Arg	Thr	Leu 635	Ser	Trp	Lys	His	Thr 640
				645				÷	650					Leu 655	
			660					665					670	Gln	-
Gln	Ala	Ser 675	Trp	Thr	Leu	Glu	Glu 680	Leu	Ser	Lys	Ala	Val 685	Lys	Met	Pro
	690					695					700			Gly	
705					710					715				Glu	720
				725					730					Glu 735	
			740		. ~			745					750	Leu	
Leu	Phe	Trp 755	Thr	Tyr	Ile	Gln	<b>Al</b> a 760	Met	Leu	Thr	Asn	Leu 765	Glu	Ser	Leu

Ser Leu Asp Arg Ile Tyr Asn Met Leu Arg Met Phe Val Val Thr Gly 770 780

Pro Ala Leu Ala Glu Ile Asp Leu Gln Glu Leu Gln Gly Tyr Leu Gln 785 790 795 800

Lys Lys Val Arg Asp Gln Gln Leu Val Tyr Ser Ala Gly Val Tyr Arg 805 810 815

Leu Pro Lys Asn Cys Ser 820

<210> 933

<211> 157

<212> PRT

<213> Homo sapiens

<400> 933

Met Ser Pro Trp Leu Leu Leu Leu Val Val Gly Ser Trp Leu Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys Arg Arg 20 25 30

Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe Trp Gly His 35 40 45

Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys Asp Ser Thr Glu 50  $\,$ 

Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val Trp Leu Gly Pro Ile 65 70 75 80

Ile Pro Phe Ile Val Leu Cys His Pro Asp Thr Ile Arg Ser Ile Thr  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Asn Ala Ser Ala Ala Ile Ala Pro Lys Asp Asn Leu Phe Ile Arg Phe 100 105 110

Leu Lys Pro Trp Leu Gly Glu Tyr Leu Gln Val Lys Gly Val Gly Asp 115 120 125

Asn Leu Ala Gly Arg Val Gly Glu Val Leu Leu Pro Ile Val Leu 130 135 140

Gly Cys Pro Thr Arg Arg Arg Asp Thr Ala Glu Trp Arg 145 150 155

<210> 934

<211> 13

<212> PRT

<213> Homo sapiens

<400> 934

Leu Val Ile Gly Gly Trp Gly Gln Arg Arg Leu Tyr Arg

1 5 10

<210> 935

<211> 126

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (119)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 935

Met Ser Pro Trp Leu Leu Leu Leu Val Val Gly Ser Trp Leu Leu 1 5 10 15

Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys Arg Arg 20 25 30

Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe Trp Gly His
35 40 45

Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys Asp Ser Thr Gln 50 55 60

Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val Trp Leu Gly Pro Ile
65 70 75 80

Ile Pro Phe Ile Val Leu Cys His Pro Asp Thr Ile Arg Ser Ile Thr 85 90 95

Asn Ala Ser Ala Ala Ile Ala Pro Lys Asp Asn Leu Phe Ile Arg Phe
100 105 110

Leu Lys Pro Trp Leu Gly Xaa Arg Asp Thr Ala Glu Trp Arg 115 120 125

<210> 936

<211> 90

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 936

Gln Asn Thr Ile Glu Cys Gly Ser Ser Thr Ala Gly Val Cys Cys Ser 1 5 10 15

Gln Leu Trp Arg Leu Xaa Val Gln Xaa Xaa Gly Thr Gly Arg Leu His 20 25 30

Val Trp Trp Gly Pro Ala Ser Trp Ser Ile Ala Ser Thr Phe Ser Leu 35 40 45

His Pro Tyr Val Val Glu Glu Ala Gly Glu Leu Ser Gly Val Ser Phe 50 60

Val Thr Pro Phe Leu Arg Leu Val His Ser His Asp Leu Ile Thr Ser 65 70 75 80

Gln Arg Pro Cys Leu Leu Thr Pro Leu Pro 85 90

<210> 937

<211> 58

<212> PRT

<213> Homo sapiens

<400> 937

Met Lys Leu Thr Phe Ser Phe Pro Trp Phe Thr Leu Thr Ala Leu Gln  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Trp Ser Ala Thr Glu Cys Gln Ala Val Val Asp Thr Met Ile Ala 20 25 30

Val Trp Ser Glu Gly Lys Gly Thr Gly Val Ser Trp Glu Pro Trp Leu 35 40 45

Leu Gly Lys Leu Gln Ser Ser Ser Phe Leu 50 55

<210> 938

<211> 34

<212> PRT

<213> Homo sapiens

<400> 938

Leu Cys Val Ser His Pro Gly Ile Thr Cys Thr Pro Leu Trp Leu Cys
1 10 15

Val Ile Ser Gln Asn Met Glu Leu Ile Leu Met Phe Arg Arg Pro Lys 20 25 30

Leu Thr

<210> 939

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<211> 6
<212> PRT
<213> Homo sapiens
<400> 939
Thr Leu Thr Ala Lys Thr
                  5
<210> 940
<211> 58
<212> PRT
<213> Homo sapiens
<400> 940
Met Lys Leu Thr Phe Ser Phe Pro Trp Phe Thr Leu Thr Ala Leu Gln
            5
Leu Trp Ser Ala Thr Glu Cys Gln Ala Val Val Asp Thr Met Ile Ala
Val Trp Ser Glu Gly Lys Gly Thr Gly Val Ser Trp Glu Pro Trp Leu
Leu Gly Lys Leu Gln Ser Ser Ser Phe Leu
                         55
<210> 941
<211> 44
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 941
Leu Lys Xaa Ile Thr Ile Cys Cys Leu Gln Lys Thr His Leu His Ser
Lys Gly Thr Glu Arg Met Lys Val Lys Gly Trp Glu Arg Val Tyr Trp
Gly Asn Ile Thr Glu Gly Asn Met Met Asn Leu Tyr
         35
<210> 942
<211> 9
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<212> PRT <213> Homo sapiens <400> 942 Leu Gly Ala Phe Ser Trp Ser Pro Lys <210> 943

<211> 96

<212> PRT

<213> Homo sapiens

<400> 943

Met Ala Arg Ser Leu Leu Ile Ile Leu Gly Ala Asp Phe Thr Phe Pro 1 5 10 15

Thr Ser Phe Asn Cys Phe Gln Lys Met Asn Leu Ala Lys Lys Ser Arg
20 25 30

Gly Ser Phe Thr His Leu Leu Thr His Ser Trp Cys Leu Ser Leu Phe 35 40 45

Leu Lys Glu Ala Asp Gln Gly Leu Arg Glu Asn Asn Phe Asp Phe Ser 50 55 60

His Val Cys Pro Ser Lys Pro Pro Leu Trp Thr Asp Ser Pro Ser Val 65 70 75 80

Pro Gly Arg Asn Trp Asp Asn Pro Arg Thr Phe Leu Val Pro Ser Arg 85 90 95

<210> 944

<211> 96

<212> PRT

<213> Homo sapiens

<400> 944

Met Ala Arg Ser Leu Leu Ile Ile Leu Gly Ala Asp Phe Thr Phe Pro 1 5 10 15

Thr Ser Phe Asn Cys Phe Gln Lys Met Asn Leu Ala Lys Lys Ser Arg 20 25 30

Gly Ser Phe Thr His Leu Leu Thr His Ser Trp Cys Leu Ser Leu Phe  $35 \cdot 40$  45

Leu Lys Glu Ala Asp Gln Gly Leu Arg Glu Asn Asn Phe Asp Phe Ser 50 55 60

His Val Cys Pro Ser Lys Pro Pro Leu Trp Thr Asp Ser Pro Ser Val 65 70 75 80

Pro Gly Arg Asn Trp Asp Asn Pro Arg Thr Phe Leu Val Pro Ser Arg 85 90 95

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<210> 945
<211> 26
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 945
Met Leu Xaa Phe Xaa Phe Phe Leu Leu Phe Phe Phe Phe Trp Trp
                                   10
Cys Cys Leu Ala Phe Phe Ser Phe Pro Phe
            20
<210> 946
<211> 77
<212> PRT
<213> Homo sapiens
<400> 946
Met Leu Phe Phe Phe Phe Leu Leu Phe Phe Phe Phe Phe Tro
                        10
Leu Val Leu Phe Gly Ile Phe Phe Phe Ser Phe Leu Lys Lys Met Phe
                                25
Ser Gly Asn Met Asn Lys His Thr Ala Asn Tyr Ser Gly Ala Gly Lys
Ala Gln Glu Leu Ala Thr Ser Gln Leu His Ser Trp Asp Gly Lys Pro
Cys Cys Glu Leu Leu Arg Leu Phe Thr Tyr Phe Thr Tyr
                    70
<210> 947
<211> 77
<212> PRT
<213> Homo sapiens
<400> 947
Met Leu Leu Phe Phe Phe Phe Leu Leu Phe Phe Phe Phe Phe Trp
```

Leu Val Leu Phe Gly Ile Phe Phe Phe Ser Phe Leu Lys Lys Met Phe

25

20

Ser Gly Asn Met Asn Lys His Thr Ala Asn Tyr Ser Gly Ala Gly Lys 35 40 45

Ala Gln Glu Leu Ala Thr Ser Gln Leu His Ser Trp Asp Gly Lys Pro 50 55 60

Cys Cys Glu Leu Leu Arg Leu Phe Thr Tyr Phe Thr Tyr 65 70 75

<210> 948

<211> 11

<212> PRT

<213> Homo sapiens

<400> 948

Met Trp Arg Trp Leu Ser Ser Phe Trp Leu Leu 1 5 10

<210> 949

<211> 11

<212> PRT

<213> Homo sapiens

<400> 949

Met Trp Arg Trp Leu Ser Ser Phe Trp Leu Leu 1 5 10

<210> 950

<211> 378

<212> PRT

<213> Homo sapiens

<400> 950

Ala Arg Glu Lys Pro Tyr Leu Val Glu Glu Ala Val Ser Tyr Asn Glu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Asp Tyr Val Ser Val Gly Leu Asp Gln Gln Thr Val Lys Leu Val 20 25 30

Cys Thr Asn Arg Arg Lys Gln Phe Leu Leu Asp Thr Ala Asp Val Ala 35 40 45

Leu Ala Glu Phe Phe Leu Ala Ser Leu Lys Ser Ala Met Ile Lys Gly 50 55 60

Cys Arg Glu Pro Pro Tyr Pro Ser Ile Leu Thr Asp Ala Thr Met Glu 65 70 75 80

Lys Leu Ala Leu Ala Lys Phe Val Ala Gl<br/>n Glu Ser Lys Cys Glu Ala 85 90 95

Ser Ala Val Thr Val Arg Phe Tyr Gly Leu Val His Trp Glu Asp Pro 100 105 110

Thr Asp Glu Ser Leu Gly Pro Thr Pro Cys His Cys Ser Pro Pro Glu 115 120 125

- Gly Thr Ile Thr Lys Glu Gly Met Leu His Tyr Lys Ala Gly Thr Ser 130 135 140
- Tyr Leu Gly Lys Glu His Trp Lys Thr Cys Phe Val Val Leu Ser Asn 145 150 155 160
- Gly Ile Leu Tyr Gln Tyr Pro Asp Arg Thr Asp Val Ile Pro Leu Leu 165 170 175
- Ser Val Asn Met Gly Gly Glu Gln Cys Gly Gly Cys Arg Arg Ala Asn 180 185 190
- Thr Thr Asp Arg Pro His Ala Phe Gln Val Ile Leu Ser Asp Arg Pro 195 200 205
- Cys Leu Glu Leu Ser Ala Glu Ser Glu Ala Glu Met Ala Glu Trp Met 210 215 220
- Gln His Leu Cys Gln Ala Val Ser Lys Gly Val Ile Pro Gln Gly Val 225 230 235 240
- Ala Pro Ser Pro Cys Ile Pro Cys Cys Leu Val Leu Thr Asp Asp Arg 245 250 255
- Leu Phe Thr Cys His Glu Asp Cys Gln Thr Ser Phe Phe Arg Ser Leu 260 265 270
- Gly Thr Ala Lys Leu Gly Asp Ile Ser Ala Val Ser Thr Glu Pro Gly 275 280 285
- Lys Glu Tyr Cys Val Leu Glu Phe Ser Gln Asp Ser Gln Gln Leu Leu 290 295 300
- Pro Pro Trp Val Ile Tyr Leu Ser Cys Thr Ser Glu Leu Asp Arg Leu 305 310 315 320
- Leu Ser Ala Leu Asn Ser Gly Trp Lys Thr Ile Tyr Gln Val Asp Leu 325 330 335
- Pro His Thr Ala Ile Gln Glu Ala Ser Asn Lys Lys Lys Phe Glu Asp 340 345 350
- Ala Leu Ser Leu Ile His Ser Ala Trp Gln Arg Ser Asp Ser Leu Cys 355 360 365
- Arg Gly Arg Ala Ser Arg Asp Pro Trp Cys 370 375

<210> 951

<211> 134

<212> PRT

<213> Homo sapiens

<400> 951

Ser Pro Ala Arg His Pro Thr Thr Ser Ser Arg His Thr Trp Trp Glu

1 5 10 15

Ser Gly Asn Ala Val Pro Pro Gly Ser Pro Phe His Gly Arg Pro Leu 20 25 30

Leu Leu Gln Fro Ala Gly Pro Val Pro Phe Gln Asp Gln Pro Phe 35 40 45

Asp Pro Ser Gln Gly Pro Trp Pro Gly Leu His Cys Arg Pro Gln Gly 50 55 60

Leu Met His Ser Met Cys Leu Pro Asp Leu Thr Pro Glu Asp Gly Gly 65 70 75 80

Lys Ala Gln Asp His Thr Ala Leu Gly His Ser Arg Glu Gln Asp Thr 85 90 95

Pro Gly Val Gln Glu Asn Phe Gln Gly Ala Ala Pro Leu Asp Arg Tyr 100 105 110

Thr Arg Arg Phe Asn Thr Leu Tyr Tyr Leu Gly Asn Gln Arg Arg Gly 115 120 125

Ile Ile Lys Thr Arg Lys 130

<210> 952

<211> 58

<212> PRT

<213> Homo sapiens

<400> 952

Met Ala Thr Ala Ser Ile Asn Asn Leu Ile Ser Ser Leu Leu Leu His 1 5 10 15

His Lys Thr Ala Cys Gly Cys Tyr Ala Asn Ser Thr Cys Leu Leu Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Asn Gly Leu Ser Asn His Lys Gly Lys Ser

<210> 953

<211> 58

<212> PRT

<213> Homo sapiens

<400> 953

Met Ala Thr Ala Ser Ile Asn Asn Leu Ile Ser Ser Leu Leu Leu His 1 5 10 15

Leu Ser Leu Leu Ser Ser Lys Ala Gly Lys Phe Leu Ile Trp Lys Glu 20 25 30

His Lys Thr Ala Cys Gly Cys Tyr Ala Asn Ser Thr Cys Leu Leu Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Asn Gly Leu Ser Asn His Lys Gly Lys Ser 50 55

<210> 954

<211> 63

<212> PRT

<213> Homo sapiens

<400> 954

Glu Asn Lys Arg Leu His Phe Gly Glu Ala Ser Thr Leu Ser Gly Leu
1 5 10 15

Leu Phe Cys Phe Met Ser Trp Cys Leu Gly Glu Asp Leu Ala Gly Phe 20 25 30

Ile Gln Ser Gly Arg Val Trp Ala Ile Leu Glu Asn Val Pro Ser Ile 35 40 45

Ser Glu Asn Lys Ser Ala Pro Ser Thr Cys Leu His Pro Gly Asp 50 60

<210> 955

<211> 77

<212> PRT

<213> Homo sapiens

<400> 955

Met Ala Gly Leu Gly Leu Leu Ser Leu Val Gln Phe Ser Val Thr Gly .  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Gly His Trp Thr Gly Ile Ala Asp Ser Leu Val Ala Thr Leu Gly Cys
20 25 30

Arg Leu Ser Gly Ser Val Pro Pro Pro Leu Leu Pro Ala Pro Ser Gly
35 40 45

His Ser Arg Ala Leu His Gln Thr Leu Thr Trp Cys Leu His Leu Leu 50 60

Ser Leu Ser Pro Ser Ser Asn Pro Trp Lys Ser Leu Val 65 70 75

<210> 956

<211> 77

<212> PRT

<213> Homo sapiens

<400> 956

Met Ala Gly Leu Gly Leu Leu Ser Leu Val Gln Phe Ser Val Thr Gly
1 5 10 15

Gly His Trp Thr Gly Ile Ala Asp Ser Leu Val Ala Thr Leu Gly Cys 20 25 30

Arg Leu Ser Gly Ser Val Pro Pro Pro Leu Leu Pro Ala Pro Ser Gly 35 40 45

His Ser Arg Ala Leu His Gln Thr Leu Thr Trp Cys Leu His Leu Leu 50 55 60

Ser Leu Ser Pro Ser Ser Asn Pro Trp Lys Ser Leu Val 65 70 75

<210> 957

<211> 27

<212> PRT

<213> Homo sapiens

<400> 957

Met Arg Ala Arg Thr Leu Pro Pro Ser Leu Leu Cys Leu Trp Cys Leu 1 5 10 15

Ala Pro Tyr Leu Asn Ile Cys Trp Met Asn Gly 20 25

<210> 958

<211> 28

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 958

Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Trp Xaa Glu Glu 1 5 10 15

Gly Gly Ser Pro Glu Val Arg Ser Ser Arg Pro Ala 20 25

<210> 959

<211> 27

<212> PRT

<213> Homo sapiens

<400> 959

Met Arg Ala Arg Thr Leu Pro Pro Ser Leu Leu Cys Leu Trp Cys Leu 1 5 10 15

Ala Pro Tyr Leu Asn Ile Cys Trp Met Asn Gly
20 25

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<210> 960
<211> 13
<212> PRT
<213> Homo sapiens
<400> 960
Pro Pro Arg Ala Ser Trp Ser Pro Arg Glu His Val Leu
                  5
                                     10
<210> 961
<211> 70
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Xaa Xaa His Glu Ser Ile Leu Leu Val Ser Leu Asp Leu Leu Pro
                                     10
Thr Ser Ile Leu Leu Val Ser Leu Trp Ile Cys Ser Pro Pro Pro Ser
Ser Trp Val Asn Pro Gly Ser Phe Val Gly Tyr Leu Glu Arg Lys Arg
Gln Lys Leu Ile Cys Gln Met Thr Arg Thr Asn Arg Leu Phe Gly Met
Lys Arg Lys Thr Ser Gly
 65
<210> 962
<211> 53
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 962
Ser Leu Ala Leu Asn Ser Pro Pro Pro Gly Leu Arg Val Pro Arg Glu
                 5
                                    10
```

Glu Arg Leu Leu Ala Thr Ser Leu Leu Gln Gly Ala Leu Pro Ala Gly

20

25

30

Pro Cys Pro Ser Thr Thr Leu Leu Ser Trp His Arg Pro Ala Xaa Pro 35 40 45

Pro Gly Ala Gln Gly 50

<210> 963

<211> 65

<212> PRT

<213> Homo sapiens

<400> 963

Ser Ile Leu Leu Val Ser Leu Asp Leu Leu Pro Thr Ser Ile Leu Leu 1 5 10 15

Val Ser Leu Trp Ile Cys Ser Pro Pro Pro Ser Ser Trp Val Asn Pro
20 25 30

Gly Ser Phe Val Gly Tyr Leu Glu Arg Lys Arg Gln Lys Leu Ile Cys 35 40 45

Gln Met Thr Arg Thr Asn Arg Leu Phe Gly Met Lys Arg Lys Thr Ser 50 60

Gly 65

<210> 964

<211> 3

<?12> PRT

<213> Homo sapiens

<400> 964 Asp Leu Lys 1

<210> 965

<211> 9

<212> PRT

<213> Homo sapiens

<400> 965

Met Asn Glu Lys Phe Leu Pro Pro Leu
1 5

<210> 966

<211> 51

<212> PRT

<213> Homo sapiens

PCT/US01/11988

WO 01/77137 <400> 966 Met Leu Arg Pro Pro Arg Trp Ala Leu Met Ala Ala Ser Ser His Pro Pro Pro Leu Trp Ser Trp Val Leu Gly Leu Ala Ala His Pro Thr Gly Met Ser Pro Gly Thr Gly Pro His His Gly Trp Val Ser Ala Ser Ser Ser Ser Ser 50 <210> 967 <211> 244 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (40) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (231)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (237)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 967

Met Arg Ala Pro Phe Asn Thr Leu Phe Gly Arg Leu Phe Gly Leu Leu

Leu Val Ala Ile Val Leu Ala His Xaa Leu Ala Phe Phe Trp Phe His

His Tyr Gly Pro Pro Pro Yaa Xaa Ala Xaa Phe Val Glu Gln Pro 35

Asp Gly Ser Leu Thr Pro Leu Arg Lys Ala Pro Arg Pro Trp Phe Gly 50 55 60

Gly Pro Val Val Pro Leu Thr Phe Gln Phe Ile Ser Leu Ile Ile Ala 65 70 75 80

Ala Trp Tyr Gly Ala Lys Leu Ser Arg Pro Ile Gln Arg Leu Ser 85 90 95

Ala Ala Glu Arg Leu Ser Val Asp Leu Asp Ser Pro Pro Leu Val 100 105 110

Glu Thr Gly Pro Arg Glu Ala Arg Gln Ala Ala Ser Thr Phe Asn Leu 115 120 125

Met Gln Lys Arg Ile Arg Glu Gln Val Ser Gln Arg Ala Arg Met Leu 130 135 140

Gly Ala Val Ser His Asp Leu Arg Thr Pro Leu Ser Arg Leu Lys Leu 145 150 155 160

Arg Leu Glu Gln Ile Glu Asp Pro Lys Leu Gln Gly Gln Met Arg Gln
165 170 175

Asp Leu Asp Asp Met Ile Gly Met Leu Asp Ala Thr Leu Ser Tyr Leu 180 185 190

His Glu Gln Arg Thr Ser Glu Thr Arg His Trp Leu Asp Val Gln Ala 195 \$200\$

Leu Val Glu Ser Leu Ser Glu Asn Ala Gln Asp Gln Gly Arg Asp Val 210 215 220

Gln Phe Phe Phe Gly Gly Xaa Pro Pro Gly Gly Gly Xaa Pro Lys Thr 225 230 235 240

Pro Pro Pro Phe

<210> 968

<211> 244

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (231)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (237)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 968

Met Arg Ala Pro Phe Asn Thr Leu Phe Gly Arg Leu Phe Gly Leu Leu 1 5 10 15

Leu Val Ala Ile Val Leu Ala His Val Leu Ala Phe Phe Trp Phe His  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

His Tyr Gly Pro Pro Pro Pro Pro Arg Ala Ala Phe Val Glu Gln Pro 35 40 45

Asp Gly Ser Leu Thr Pro Leu Arg Lys Ala Pro Arg Pro Trp Phe Gly 50 55 60

Gly Pro Val Val Pro Leu Thr Phe Gln Phe Ile Ser Leu Ile Ile Ala 65 70 75 80

Ala Trp Tyr Gly Ala Lys Leu Leu Ser Arg Pro Ile Gln Arg Leu Ser 85 90 95

Ala Ala Ala Glu Arg Leu Ser Val Asp Leu Asp Ser Pro Pro Leu Val 100 105 110

Glu Thr Gly Pro Arg Glu Ala Arg Gln Ala Ala Ser Thr Phe Asn Leu 115 120 125

Met Gln Lys Arg Ile Arg Glu Gln Val Ser Gln Arg Ala Arg Met Leu 130 135 140

Gly Ala Val Ser His Asp Leu Arg Thr Pro Leu Ser Arg Leu Lys Leu 145 150 155 160

Arg Leu Glu Gln Ile Glu Asp Pro Lys Leu Gln Gly Gln Met Arg Gln 165 170 175

Asp Leu Asp Asp Met Ile Gly Met Leu Asp Ala Thr Leu Ser Tyr Leu 180 185 190

His Glu Gln Arg Thr Ser Glu Thr Arg His Trp Leu Asp Val Gln Ala 195 . 200 205

Leu Val Glu Ser Leu Ser Glu Asn Ala Gln Asp Gln Gly Arg Asp Val 210 215 220

Gln Phe Phe Phe Gly Gly Xaa Pro Pro Gly Gly Gly Xaa Pro Lys Thr 225 230 235 240

Pro Pro Pro Phe

<210> 969

<211> 85

<212> PRT

<213> Homo sapiens

<400> 969

Gly Ile Gly Ser Arg Val Arg Ala Ala Phe Ile Ala Leu Glu Pro Ser 1 5 10 15

Leu Gly Met Gly Phe Ser Lys Asn Trp Gln Ala His Arg Leu Pro Ser 20 25 30

Lys Trp Val Arg Thr Ala Tyr Pro Ser Ile Glu Thr His Tyr Leu Phe

35 40 45

Tyr Leu Phe Leu Ser Gly Ser Gly Ala Arg Cys Ser Tyr Phe Ser His 50 60

Leu Arg Trp Asp Ile Leu Gly Gln Thr Arg Glu Ile Leu Glu Ala Ile 65 70 75 80

Ser Val Val Asn Pro

<210> 970

<211> 54

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 970

Met Lys Thr Val Ser Leu Leu Leu Thr Leu Trp Phe Ser Gln Thr Phe 1 5 10 15

Ser Phe Asn Leu Phe Phe Ala Pro Pro His Ser Leu Leu Gln Ser Ser 20 25 30

Ile Xaa Xaa Ser Val Ser Ser Ile Thr Thr Val His Pro Xaa Leu Gly 35 40 45

Leu Leu Phe Cys Ile Leu 50

<210> 971

<211> 37

<212> PRT

<213> Homo sapiens

<400> 971

Ile Leu Leu Gly Leu Trp Gln Ser Val Leu Gly Ser Ser Ile Trp Gly
1 5 10 15

Gln Pro Leu Ser Tyr Asn Cys Gln Glu Pro His Asn Cys Leu Phe Asn 20 25 30

His Ser Asp Phe Lys 35

<210> 972

<211> 56

<212> PRT

<213> Homo sapiens

<400> 972

Met Lys Thr Val Ser Leu Leu Thr Leu Trp Phe Ser Gln Thr Phe  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ser Phe Asn Leu Phe Phe Ala Pro Pro His Ser Leu Leu Gln Ser Ser 20 25 30

Ile Phe Phe Ser Val Ser Ser Ile Thr Thr Val His Pro Ile Leu Val 35 40 45

Phe Phe Phe Ala Phe Phe Arg Thr 50 55

<210> 973

<211> 65

<212> PRT

<213> Homo sapiens

<400> 973

Lys Leu Thr Gln Ala Gly Ser Gly Tyr Val His Arg Glu Ile Phe Pro 1 5 10 15

Arg Val Cys Phe Phe Asp Ile Leu Ser Pro Ser Phe Tyr Leu Leu Ala 20 25 30

Gly Ile Ser Cys Pro Thr Thr Pro Val Ile Ile Cys Lys Pro Leu Tyr 35 40 45

Ser Phe Gln Cys Leu Lys Val Ile His Lys Glu Gly Arg Asn Lys Arg 50 55 60

Val

65

<210> 974

<211> 11

<212> PRT

<213> Homo sapiens

<400> 974

Met Thr Leu Ser Asn Trp Glu Tyr Gly Phe His  $1 \hspace{1cm} 5 \hspace{1cm} 10$ 

<210> 975

<211> 60

<212> PRT

<213> Homo sapiens

<400> 975

Met Pro Phe Tyr Tyr Ala Gly Leu Ile Leu Met Glu Met Arg Leu Thr  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ile Ala Lys Thr Pro Val Glu Thr Gln Gln Ser Trp Pro Ala Phe Leu 20 25 30

Trp Tyr Phe Gly Cys Gly Ser Cys Asp Gly Tyr Ser Ile Lys His Cys 40 45

Ile Ser Leu His Leu Leu Ser Phe Ser Leu Gln Lys
50 55 60

<210> 976

<211> 24

<212> PRT

<213> Homo sapiens

<400> 976

Ile Cys Leu Trp Gly Arg Pro Asn Leu Thr Thr Gln Gly Thr Leu Lys  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Gly Ile Ser Gly Arg Arg Ser Gln 20 .

<210> 977

<211> 128

<212> PRT

<213> Homo sapiens

<400> 977

Pro Glu Thr Phe Leu Leu Val Thr Gly Ser Gln Trp Gly Ile Leu Gly 1 5 10 15

Cys Gln Gly Pro Arg Val Thr Cys Val Gln Leu Phe Tyr Gly Ser Arg 20 25 30

Gly Leu Ser Leu Arg Gln Ala Thr Lys Cys Pro Gly Cys His Pro Pro 35 40 45

Trp Ser Pro Ser Val Pro His Ala Trp Ser Pro Ala Ser Pro Arg Ile
50 55 60

Pro Val Ala Phe Ile Ser Gly Gln Leu Pro Ala Arg Pro Gly Leu Gly 65 70 75 80

His Gly Leu Arg His Glu Ala Arg Pro Pro Pro Ala Pro Leu Pro Arg 85 90 95

Gly Ser Ser He Pro Leu His Phe Trp Asn Val Cys Ala Ser Met Met 100 105 110

Phe Val Tyr Leu Arg His Leu Lys Ile Tyr Phe Arg Tyr Glu Gly Lys
115 120 125

<210> 978

<211> 23

<212> PRT

<213> Homo sapiens

<400> 978

Ile Cys Leu Trp Gly Arg Pro Asn Leu Thr Thr Gln Gly Thr Leu Lys 1  $\phantom{0}$  5  $\phantom{0}$  10  $\phantom{0}$  15

Gly Ile Ser Gly Arg Arg Ser 20

<210> 979

<211> 78

<212> PRT

<213> Homo sapiens

<400> 979

Arg His Leu Gln Val Gly Gly Gln His Gln Cys Gly Gln Ala Cys

1 10 15

Leu Asp Ser Ser Tyr Arg Pro Leu Leu Cys Met Met Trp Glu Pro Gly 20 25 30

His Ser His Ala Pro Ser Arg Ala Gln Gly Cys Gly Ser Thr Thr Glu 35 40 45

His Pro Leu Ser His Cys Pro Pro Leu Pro Arg Ala Leu Pro Ser Pro 50 55 60

Pro Leu Leu His His Ser Ser Phe Lys Val Pro Leu Leu Tyr 65 70 75

<210> 980

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 980

Met Pro Leu Gln Arg Arg Val Lys Val Lys Thr Thr Ser Ser Arg Cys  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Pro Gly Thr Thr Trp Gly Leu Thr Leu Phe Ser Met Leu Cys Cys

30

20 25

Phe Trp Pro Leu Gly Ile Ala Ala Phe Tyr Phe Ser  $\overline{\text{Gln}}$   $\overline{\text{Gly}}$  Thr Ser  $\overline{\text{35}}$   $\overline{\text{40}}$   $\overline{\text{45}}$ 

Lys Ala Ile Ser Lys Gly Asp Phe Arg Leu Ala Ser Thr Thr Ser Arg 50 55 60

Arg Ala Leu Phe Leu Ala Thr Xaa Ala Ile Ala Val Gly Ala Gly Leu 55 70 75 80

Tyr Val Ala Val Val Ala Leu Ala Ala Tyr Met Ser Gln Asn Gly 85 90 95

His Gly

<210> 981

<211> 68

<212> PRT

<213> Homo sapiens

<400> 981

Met Pro Leu Gln Arg Arg Val Lys Val Lys Thr Thr Ser Ser Arg Cys , 1 5 10 15

Leu Pro Gly Thr Thr Trp Asp Leu Leu Ser Ser Pro Cys Ser Ala Ala 20 25 30

Ser Gly His Trp Ala Leu Leu Pro Ser Thr Ser Pro Arg Gly Pro Ala 35 40 45

Arg Pro Ser Pro Lys Gly Thr Ser Ala Trp Pro Ala Pro Pro Pro Ala 50 55 60

Gly Pro Ser Ser

<210> 982

<211> 68

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<310>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 982

Met Leu Leu Pro Leu Phe Thr Leu Leu Ile Leu Leu Leu Arg Val Phe 1 5 10 15

Pro Lys Glu Ile Ile Gln Asn Arg Xaa Lys Leu Lys Ala Glu Lys Cys 20 25 . 30

Trp Asn Met Thr Leu Phe Ile Ala Val Gly Lys Met Gly Gly Trp Gly 35 40 45

Thr Trp Xaa Met Leu Glu Ile Xaa Ala Leu Cys Glu Gly Pro Val Gly 50 55 60

Glu Asp Ala Leu

<210> 983

<211> 8

<212> PRT

<213> Homo sapiens

<400> 983

Arg Val Phe Pro Val Thr Thr Leu
1 5

<210> 984

<211> 32

<212> PRT

<213> Homo sapiens

<400> 984

Met Leu Leu Pro Leu Phe Thr Leu Leu Ile Leu Leu Leu Arg Val Phe 1 5 10 15

Pro Lys Glu Ile Ile Gln Asn Arg Lys Lys Leu Lys Ala Glu Lys Cys
20 25 30

<210> 985

<211> 10

<212> PRT

<213> Homo sapiens

<400> 985

Met Gly Leu Phe Leu Phe Leu Val Ser Ser 1 5 10

<210> 986

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<211> 10
<212> PRT
<213> Homo sapiens
<400> 986
Met Gly Leu Phe Leu Phe Leu Val Ser Ser
<210> 987
<211> 56
<212> PRT
<213> Homo sapiens
<400> 987
Met Leu Thr Gly Val Ile Ser Gly Ser Thr Gly Ala Met Ala Leu Ser
                                     10
Leu Ala Ser Leu Ser Ala His Cys Phe Ala Phe Arg Cys Leu Ala Ala
                                 25
             20
Pro Phe Tyr Phe Phe Ala Gly Leu Gly Lys His Gly Arg Arg Ile Leu
Ile Ser Phe Leu Phe Ser Ala Trp
    50
<210> 988
<211> 56
<212> PRT
<213> Homo sapiens
<400> 988
Met Leu Thr Gly Val Ile Ser Gly Ser Thr Gly Ala Met Ala Leu Ser
Leu Ala Ser Leu Ser Ala His Cys Phe Ala Phe Arg Cys Leu Ala Ala
                                 25
Pro Phe Tyr Phe Phe Ala Gly Leu Gly Lys His Gly Arg Arg Ile Leu
Ile Ser Phe Leu Phe Ser Ala Trp
    50
<210> 989
<211> 56
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<212> PRT <213> Homo sapiens <220> <221> SITE <122> (3) <223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 989
Ala Glu Xaa Ala Pro Leu His Phe His Leu Gly Asp Gly Glu Arg Leu
His Leu Lys Lys Lys Lys Lys Lys Lys Lys Pro Lys Gln Gly Trp
Ala Arg Trp Leu Thr Pro Val Ile Ser Ala Leu Leu Glu Xaa Gly Ala
Gly Val Ser Pro Glu Val Met Ser
<210> 990
<211> 29
<212> PRT
<213> Homo sapiens
<400> 990
Met Leu Val Ile Ile Ile Met Thr Ala Leu Val Ser His Val Pro Ser
Val His Ser Val Pro His Ala Val Pro Phe Thr Ser Ser
             20
<210> 991
<211> 29
<212> PRT
<213> Homo sapiens
Met Leu Val Ile Ile Ile Met Thr Ala Leu Val Ser His Val Pro Ser
                 5
Val His Ser Val Pro His Ala Val Pro Phe Thr Ser Ser
             20
<210> 992
<211> 60
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220> <221> SITE

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<222> (34)
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<223> Xaa equals any of the naturally occurring L-amino acids

## <400> 992

Val Phe Lys Thr Ile Arg Xaa Arg Glu Ile Ile Leu Tyr His Glu Asn 1 5 10 15

Ser Thr Gly Lys Thr His Pro His Asp Ser Leu Ile Ser His Trp Val 20 25 30

Pro Xaa Thr Thr Gln Gly Asn Tyr Gly Ser Tyr Lys Met Arg Phe Gly 35 40 45

Trp Gly His Arg Ala Arg Pro Tyr Gln Pro Pro Lys 50 55 60

<210> 993

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 993

Met Asp Ile Gln Gly Lys Ala Leu Tyr Ile Arg Phe Leu Leu Thr Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Cys Gln Met Val Val Ser Val Met Gly Lys Arg Xaa Gln Gly Arg Arg 20 25 30

Gly Leu Gly Gly Ala Ala Ala Val Gly Arg Glu Ile Cys Arg Arg Trp 35 40 45

Gly Cys Cys Val Thr

<210> 994

<211> 12

<212> PRT

<213> Homo sapiens

<400> 994

Leu Cys Trp Thr Arg Ser Ser Val Ile Gly Ala His  $1 \hspace{1cm} 5 \hspace{1cm} 10$ 

<210> 995

<211> 53

<212> PRT

<213> Homo sapiens

<400> 995

Met Asp Ile Gln Gly Lys Ala Leu Tyr Ile Arg Phe Leu Leu Thr Leu 1 5 10 15

Cys Gln Met Val Val Ser Val Met Gly Lys Arg Arg Gln Gly Arg Arg 20 25 30

Gly Leu Gly Gly Ala Ala Ala Val Gly Arg Glu Ile Cys Arg Arg Trp \$35\$ 40 45

Gly Cys Cys Val Thr

<210> 996

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 996

Lys Gln Gly Ser Leu Leu Gly Trp Ser Arg Val Ile Met Val Arg Gly
1 5 10 15

Ala Gln Ser Tyr Xaa Lys Gly Val Leu Cys Arg His Trp Lys Lys Phe 20 25 30

Gly Phe Tyr Ser Lys Trp Asn Trp Lys Pro Leu Glu Cys Phe Gln Asn 35 40 45

Arg Ser Asp Val Ile . 50

<210> 997

<211> 53

<212> PRT

<213> Homo sapiens

<400> 997

Met Arg Leu Ile Leu Phe Ala Met Ser Pro Lys Leu Leu Phe Leu Phe 1 5 10 15

Leu Phe Leu Tyr Ile Ser Val Lys Ser Phe Asp Leu Val Leu Ser Phe 20 25 30

Arg Ser Val Leu Phe Met Ser Asp Leu Ile His Cys Phe Tyr His Gln
35 40 45

Leu His Phe Lys Leu
50

<210> 998

<211> 53

<212/ PRT

<213> Homo sapiens

<400> 998

Met Arg Leu Ile Leu Phe Ala Met Ser Pro Lys Leu Leu Phe Leu Phe 1 5 10 15

Leu Phe Leu Tyr Ile Ser Val Lys Ser Phe Asp Leu Val Leu Ser Phe 20 25 30

Arg Ser Val Leu Phe Met Ser Asp Leu Ile His Cys Phe Tyr His Gln 35 40 45

Leu His Phe Lys Leu 50

<210> 999

<211> 79

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 999

Leu Gly Ile Trp Leu Ile Pro Gly Leu Arg Arg Ala Asn Pro Lys Ile 1 5 10 15

Ser Leu Glu Tyr Leu Met Val Pro Glu Asn Lys Tyr Ser Lys Asn Cys 20 25 30

Glu Xaa Met Leu Lys Gly Leu Arg Ser Gln Pro Glu Gly Ala Ala Asn 35 40 45

Gly Gln Ser Trp Asn Asn Ser Asn Lys Val Asn Lys Tyr Ser Ile Gly
50 55 60

Leu Leu Leu Asn Lys Cys Met Ile His Glu Ser Thr Leu Lys Asp 65 70 75

<210> 1000

<211> 43

<212> PRT

<213> Homo sapiens

<400> 1000

Met Phe His Arg Phe Phe Ile Leu Ser Ala Leu Ser Arg Ile Arg Ala 1 5 10 15

Leu Thr Thr Phe Leu Asp Asp Leu Gly Met Thr His Gln Thr Leu Leu 20 25 30

Leu Leu Cly Pro Ser Ile Tyr Ser Phe Cys

35 40

<210> 1001 <211> 43

<212> PRT

<213> Homo sapiens

<400> 1001

Met Phe His Arg Phe Phe Ile Leu Ser Ala Leu Ser Arg Ile Arg Ala 1 5 10 15

Leu Thr Thr Phe Leu Asp Asp Leu Gly Met Thr His Gln Thr Leu Leu 20 25 30

Leu Leu Gly Pro Ser Ile Tyr Ser Phe Cys 35 40

<210> 1002

<211> 111

<212> PRT

<213> Homo sapiens

<220>

<221> SITE .

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (108)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (109)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (111)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1002

Val Gln Val Leu Thr Gln Tyr Tyr Gln Ser Asn Ile Leu Asn Ile Leu 1 5 10 15 .

Ser Gln Val Ile Cys Leu Ser Ile Val Tyr Phe Glu Gly Phe Leu Ser 20 25 30

Phe Thr Phe Asn Leu Phe Phe Ile Ser Ile Ser Ser Xaa Val Ala Leu 35 40 45

Ser Tyr Ser Tyr Pro Asp Ile His Leu Ile Ser Glu Gly Leu Asp Ile 50 55 60

Thr Leu Val Lys Met Gln Ser Asp Leu Ile Leu Phe Leu Lys Gln Thr
65 70 75 80

Ala Val Leu Leu Glu Arg Pro Arg Ala His Arg Phe Ser Thr Arg Val
85 90 95

Gly Tyr Xaa Val Ser Val His Xaa Ser Gly Ser Xaa Xaa Val Xaa 100 105 110

<210> 1003

<211> 43

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1003

Met Leu Tyr Val Arg Leu Leu Lys Asn Thr Lys Ile Xaa Val Leu Ile 1 5 10 15

Leu Pro Leu Phe Ile Leu Phe Leu Thr Leu Phe Leu Phe Ile Pro Asn 20 25 30

Gly Phe Leu Phe Val Phe Val Ser Leu Tyr Phe 35 40

<210> 1004

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1004

Met Phe Ile Val Phe Ser Val Leu Leu Leu Phe Phe Gln Phe Ala Ile 1 5 10 15

Cys Gln Phe Ala Asp Leu Ala Ile Phe Pro Leu Ser Met Cys Gln Leu 20 25 30

Cys Asn Leu Ser Ala Arg Leu Ala Ala Pro Ser Ala Arg Phe Glu Gly 35 40 45

Leu Gly Ile Asn Arg Thr Arg Lys Ala Glu Gly Ser Leu Pro Thr Thr 50 55 60

Ala Val Gln Leu Pro Tyr Lys Ser Gln Ala Val Gln Val Gln His
65 70 75 80

Pro Gln Ala Val Ile Val Asp Lys Leu Ser Val Ile Ser Leu Arg Ser 85 90 95

Ile Cys Ile Asp Gln Leu Lys Phe Met Glu Met Glu Asn Ile Ile Lys 100 105 110

Pro Gly Tyr Val Thr Ser 115

<210> 1005

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (55)

<223> Xaa equals any of the naturally occurring L-amino acids

< 220>

<221> SITE

<222> (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1005

Ser Ile Lys Ser Cys Ser Ser Phe Tyr Leu Gly Ser Arg Val Asn Arg 1 5 10 15

Ala Gln Leu Thr Asn Tyr Pro Pro Ala Met Arg Thr Tyr Val Tyr Glu

Cys His Cys Asp Lys Ser Thr Ser Arg Ala Thr Ala Gly Pro Ser Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Phe His Pro Gly Gly Val Xaa Gly Met Trp Xaa Ile Phe Ala Xaa Val 50 55 60

<210> 1006

<211> 42

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (21)

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<223> Kaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1006
His Ser Pro Glu Ser Cys Tyr Ser Phe Asn Leu Gly Ser Arg Met Arg
Ile Ser Val Glu Xaa Lys Xaa Ala Lys Ser Asn Ser Ala Ala Asp Asn
                                 25
             2.0
Pro Glu Thr Leu Arg Lys Gly Tyr Val Xaa
        3.5
                             40
<210> 1007
<211> 76
<212> PRT
<213> Homo sapiens
<400> 1007
Met Leu Val Leu Leu Ser Leu Leu Ala Ser Gly Gly Leu Pro Leu Leu
Leu Val Gly Asp Val Leu Ala Ser Lys Ser Ser Thr Val Leu Phe Leu
                                 25
Pro Gly Asp Ser Ser Pro Gly Cys Ser Met Ile Thr Pro Leu Pro Pro
Ser Arg Met Cys Leu Lys Ala Gly Ser Ser Gly Glu Gln Thr Val Val
Pro Leu Ser Leu Leu Leu Arg Ser Lys Ser Ser Lys
55
<310> 1008
<211> 76
<212> PRT
<213> Homo sapiens
<320>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids
```

10

Met Leu Val Jeu Leu Ser Leu Leu Ala Ser Gly Gly Leu Pro Leu Leu

<400> 1008

```
Leu Val Gly Asp Val Leu Ala Ser Lys Ser Ser Thr Val Leu Phe Leu
20 25 30
```

Pro Gly Asp Ser Ser Pro Gly Cys Ser Met Ile Thr Pro Leu Pro Pro 35 40 45

Ser Arg Met Cys Leu Lys Ala Gly Ser Ser Gly Glu Gln Thr Val Val 50 60

Pro Leu Ser Leu Leu Leu Xaa Ser Lys Ser Ser Lys 65 70 75

<210> 1009

<211> 9

<212> PRT

<213> Homo sapiens

<400> 1009

Cys His Leu Gln His Ser Cys Arg Glu 1 5

<210> 1010

<211> 34

<212> PRT

<213> Homo sapiens

<400> 1010

Met Thr Ala Leu Phe Cys Ser Leu Leu His Ser Leu Val Ser Leu Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Pro Thr Lys Trp Gly Gln Gly Lys Ala Phe Leu Thr Gly Pro Leu 20 25 30

Phe Ser

<210> 1011

<211> 10

<212> PRT

<213> Homo sapiens

<400> 1011

Phe Ser Cys Cys Leu Ser Leu Pro Ile Ser 1 5 10

<210> 1012

<211> 71

<212> PRT

<213> Homo sapiens

<400> 1012

Met Trp Cys Leu Val Phe Cys Ser Cys Val Ser Leu Pro Arg Met Met

1 5 10 15

Ala Ser Ser Phe Ile His Asp Ile Ala Lys Asp Met Ile Ser Phe Leu 20 25 30

Phe Met Ser Ala Trp Tyr Tyr Thr Tyr Phe Asn Ser Phe Glu Ile Tyr 35 40 45

Arg Phe Gln Phe Thr Phe Ile Glu Tyr Ser Leu Trp Val Lys His His 50 60

Ala Ser Leu Pro Gly Val Gln 65 70

<210> 1013

<211> 71

<212> PRT

<213> Homo sapiens

<400> 1013

Met Trp Cys Leu Val Phe Cys Ser Cys Val Ser Leu Pro Arg Met Met  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ala Ser Ser Phe Ile His Asp Ile Ala Lys Asp Met Ile Ser Phe Leu 20 25 30

Phe Met Ser Ala Trp Tyr Tyr Thr Tyr Phe Asn Ser Phe Glu Ile Tyr 35 40 45

Arg Phe Gln Phe Thr Phe Ile Glu Tyr Ser Leu Trp Val Lys His His 50 60

Ala Ser Leu Pro Gly Val Gln 65 70

<210> 1014

<211> 74

<212> PRT

<213> Homo sapiens

<400> 1014

Ala Arg Arg Glu Gly Arg Ser Arg Thr Ala Val Gly Ser Thr Pro Ala
1 5 10 15

Ala Pro Leu Ser Leu Thr Arg Gly Gly Gln Cys Pro Ser Arg Gly Ser 20 25 30

Pro Leu Ala Leu Phe Gly His Pro Leu Ala Ser Gln Lys His Ser Glu 35 40 45

Thr Lys Thr Phe Pro Phe Pro Pro Pro His Met Val Leu Arg Leu Pro 50 55 60

Ala Ala Met Gln Leu Lys Gln Leu Ile Phe 65

```
<210> 1015
<211> 21
<212> PRT
<213> Homo sapiens
<400> 1015
Met Ser Leu Ser Leu Ile Ser Leu Ser Phe Leu Phe Pro Ala Gly Ala
                                   10
Gly Arg Arg Ser Cys
            20
<210> 1016
<211> 21
<212> PRT
<213> Homo sapiens
<400> 1016
Met Ser Leu Ser Leu Ile Ser Leu Ser Phe Leu Phe Pro Ala Gly Ala
                                     10
Gly Arg Arg Ser Cys
             20
<210> 1017
<211> 25
<212> PRT
<213> Homo sapiens
<400> 1017
Met Leu His Trp Gly Val Leu Cys Ser Leu Phe Leu Met Leu Phe Asn
Glu Gly Ala Ser Ala Ser Leu Gln Gln
<210> 1018
<211> 55
<212> PRT _
<213> Homo sapiens
<400> 1018
Met Leu His Trp Gly Val Leu Cys Ser Leu Phe Leu Met Leu Phe Asn
Glu Gly Ala Ser Ala Ser Leu Ser Asn Lys Arg Ser Met Arg Glu Asp
                                 25
Arg Ala Val His Gly Tyr Gly Tyr Trp Thr Arg Ile Phe Gly Lys Val
```

40

Lys Ala Asp His Trp Ile Trp 50 55

<210> 1019

<211> 95

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1019

Met Arg Ala Cys Leu Cys Ala Gly Val Cys Met Cys Xaa Ala Ser Cys 1 10 15

Leu Gly Leu Pro Met Asn Val Val Glu Cys Tyr Thr Trp Arg Val Leu 20 25 30

Val Phe His Gln Phe Gln Asp Glu Glu Leu His Asp Thr Val Asp Leu 35 40 45

Glu Thr Ile Pro Leu Glu Arg Gln Pro Arg Asp Val Gln His Pro Val 50 55 60

Ser Thr Arg Ile Leu Tyr Leu His Val Tyr Phe Val Ala Val Thr Leu 65 70 75 80

Thr Leu Ile Arg Ile Leu Gln Leu Trp Thr Glu Ala Phe Ser Pro 85 90 95

<210> 1020

<211> 261

<212> PRT

<213> Homo sapiens

<400> 1020

Met Glu Leu Ceu Gln Val Thr Ile Leu Phe Leu Leu Pro Ser Ile Cys
1 10 15

Ser Ser Asn Ser Thr Gly Val Leu Glu Ala Ala Asn Asn Ser Leu Val

Val Thr Thr Lys Pro Ser Ile Thr Thr Pro Asn Thr Glu Ser Leu 35 40 45

Gln Lys Asn Val Val Thr Pro Thr Thr Gly Thr Thr Pro Lys Gly Thr
50 60

Ile Thr Asn Glu Leu Leu Lys Met Ser Leu Met Ser Thr Ala Thr Phe 65 70 75 80

Leu Thr Ser Lys Asp Glu Gly Leu Lys Ala Thr Thr Thr Asp Val Arg 85 90 95

Lys Asn Asp Ser Ile Ile Ser Asn Val Thr Val Thr Ser Val Thr Leu 100 105 110

Pro Asn Ala Val Ser Thr Leu Gln Ser Ser Lys Pro Lys Thr Glu Thr 115 120 125

Gln Ser Ser Ile Lys Thr Thr Glu Ile Pro Gly Ser Val Leu Gln Pro 130 135 140

Asp Ala Ser Pro Ser Lys Thr Gly Thr Leu Thr Ser Ile Pro Val Thr 145 150 155 160

Ile Pro Glu Asn Thr Ser Gln Ser Gln Val Ile Gly Thr Glu Gly Gly
165 170 175

Lys Asn Ala Ser Thr Ser Ala Thr Ser Arg Ser Tyr Ser Ser Ile Ile 180 185 190

Leu Pro Val Val Ile Ala Leu Ile Val Ile Thr Leu Ser Val Phe Val 195 200 205

Leu Val Gly Leu Tyr Arg Met Cys Trp Lys Ala Asp Pro Gly Thr Pro 210 215 220

Glu Asn Gly Asn Asp Gln Pro Gln Ser Asp Lys Glu Ser Val Lys Leu 225 230 235 240

Leu Thr Val Lys Thr Ile Ser His Glu Ser Gly Glu His Ser Ala Gln 245 250 255

Gly Lys Thr Lys Asn 260

<210> 1021

<211> 260

<212> PRT

<213> Homo sapiens

<400> 1021

Met Glu Leu Leu Gln Val Thr Ile Leu Phe Leu Leu Pro Ser Ile Cys 1 5 10 15

Ser Ser Asn Ser Thr Gly Val Leu Glu Ala Ala Asn Asn Ser Leu Val

Thr Thr Thr Lys Pro Ser Ile Thr Thr Pro Asn Thr Glu Ser Leu Gln
35 40 45

Lys Asn Val Val Thr Pro Thr Thr Gly Thr Thr Pro Lys Gly Thr Ile 50 55 60

Thr Asn Glu Leu Leu Lys Met Ser Leu Met Ser Thr Ala Thr Phe Leu 65 . 70 75 80

Thr Ser Lys Asp Glu Gly Leu Lys Ala Thr Thr Thr Asp Val Arg Lys
90
95

Asn Asp Ser Ile Ile Ser Asn Val Thr Val Thr Ser Val Thr Leu Pro

100 105 110

Asn Ala Val Ser Thr Leu Gln Ser Ser Lys Pro Lys Thr Glu Thr Gln 115 120 125

Ser Ser Ile Lys Thr Thr Glu Ile Pro Gly Ser Val Leu Gln Pro Asp 130 135 140

Ala Ser Pro Ser Lys Thr Gly Thr Leu Thr Ser Ile Pro Val Thr Ile 145 150 155 160

Pro Glu Asn Thr Ser Gln Ser Gln Val Ile Gly Thr Glu Gly Gly Lys 165 170 175

Asn Ala Ser Thr Ser Ala Thr Ser Arg Ser Tyr Ser Ser Ile Ile Leu 130 185 190

Pro Val Val Ile Ala Leu Ile Val Ile Thr Leu Ser Val Phe Val Leu 195 200 205

Val Gly Leu Tyr Arg Met Cys Trp Lys Ala Asp Pro Gly Thr Pro Glu 210 215 220

Asn Gly Asn Asp Gln Pro Gln Ser Asp Lys Glu Ser Val Lys Leu Leu 225 230 235 240

Thr Val Lys Thr Ile Ser His Glu Ser Gly Glu His Ser Ala Gln Gly \$245\$ \$250\$

Lys Thr Lys Asn 260

<210> 1022

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1022

Cys Val Leu Glu Pro Thr Ser Ser Gln Ser Ile Ala Pro Asp Leu Gly  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Arg Glu Ser Thr Phe Ser Ile Gln Arg Asn Lys Asn Met Gln Phe Met 20 25 30

Val Val Leu Trp Thr Leu Thr Asp Cys Glu Gly Lys Val Tyr Pro Lys 35 40 45

Ala Val Ile Cys Arg

<210> 1023

<211> 41

<212> PRT

<213> Homo sagiens

<400> 1023

Met Met Leu Pro Val Ile Ser Leu Phe Leu Ile Ser Leu His Leu Pro 1 5 10 15

Ile Phe Cys Phe Gln Arg Leu Leu Phe Lys Gly Phe Leu Phe Ile 20 25 30

Ala Asn Ser Ser Asn Leu His Ile Lys 35 40

<210> 1024

<211> 41

<212> PRT

<213> Homo sapiens

<400> 1024

Met Met Leu Pro Val Ile Ser Leu Phe Leu Ile Ser Leu His Leu Pro 1 5 10 15

Ile Phe Cys Phe Gln Arg Leu Leu Phe Lys Gly Phe Leu Phe Ile 20 25 30

Ala Asn Ser Ser Asn Leu His Ile Lys
35 40

<210> 1025

<211> 162

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1025

Lys Thr Val Met Leu Pro Ile Ala Gln Glu Val Gln Ser Pro Val Xaa 1 5 10 15

Xaa Xaa Cys Asp Lys Leu Ala Ala Asp Cys Ala His Glu Leu Arg Arg 20 25 30

His Gly Val Ser Cys Val Ser Leu Trp Pro Gly Ile Val Gln Thr Glu 35 40 45

Leu Leu Lys Glu His Met Ala Lys Glu Glu Val Leu Gln Asp Pro Val
50 55 60

Leu Lys Gln Phe Lys Ser Ala Phe Ser Ser Ala Glu Thr Thr Glu Leu 65 70 75 80

Ser Gly Lys Cys Val Val Ala Leu Ala Thr Asp Pro Asn Ile Leu Ser 90 95

Leu Ser Gly Lys Val Leu Pro Ser Cys Asp Leu Ala Arg Arg Tyr Gly
100 105 110

Leu Arg Asp Val Asp Gly Arg Pro Val Gln Asp Tyr Leu Ser Leu Ser 115 120 125

Ser Val Leu Ser His Val Ser Gly Leu Gly Trp Leu Ala Ser Tyr Leu 130 135 140

Pro Ser Phe Leu Arg Val Pro Lys Trp Ile Ile Ala Leu Tyr Thr Ser 145 150 155 160

Lys Phe

<210> 1026

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1026

Met Ala Arg Trp Leu Leu Pro Cys Leu Pro Pro Leu His Ser Val Thr 1 5 10 15

Ser Trp Leu Leu Thr Val Pro Thr Ser Cys Gly Ala Met Gly Ser Ala 20 25 30

Val Cys Leu Cys Gly Arg Gly Leu Cys Arg Gln Asn Cys 35 40 45

<210> 1027

<211> 37

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1027

Leu Pro Pro Phe Pro Gln Cys Asp Lys Leu Ala Ala Asp Cys Pro Thr

1 10 15

Ser Cys Gly Ala Met Gly Ser Ala Val Cys Leu Cys Xaa Arg Gly Leu 20 25  $\cdot$  30

Cys Arg Gln Asn Cys 35

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<210> 1028
<211> 45
<212> PRT
<213> Homo sapiens
<400> 1028
Met Ala Arg Trp Leu Leu Pro Cys Leu Pro Pro Leu His Ser Val Thr
Ser Trp Leu Leu Thr Val Pro Thr Ser Cys Gly Ala Met Gly Ser Ala
Val Cys Leu Cys Gly Arg Gly Leu Cys Arg Gln Asn Cys
                            40
<210> 1029
<211> 29
<212> PRT
<213> Homo sapiens
<400> 1029
Met Asp Gln Phe Leu Gln Tyr Leu Leu Glu Cys Met Leu Leu Cys Thr
        5
                           10
Thr Ala Gly Ala Ser Gly Ala Thr Tyr Val Pro Thr Arg
<210> 1030
<211> 42
<212> PRT
<213> Homo sapiens
<400> 1030
Met Asp Gln Phe Leu Gln Tyr Leu Leu Glu Cys Met Leu Leu Cys Thr
Thr Ala Gly Ala Ser Gly Ala His Leu Cys Thr Asn Glu Met Thr Leu
Leu Glu Ala Ile Leu Tyr Leu Gln Trp Met
<210> 1031
<211> 53
<212> PRT
<213> Homo sapiens
<400> 1031
```

Cys Leu Ile Leu Gln Glu Glu Asn Arg Lys Glu Leu Ser Asn Leu Ala

Asn Arg Tyr Lys Ile Asp Ser Arg Val Leu Ser Pro Thr Leu Gly Trp 20 25 30

Gln Pro Val Gly Gln Thr Pro Lys Thr Val Ala Asp Val Phe Phe Cys 35 40 45

Leu Pro Ser Leu Gly 50

<210> 1032

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1032

Met Leu Leu Phe His Val Trp Val Asp Leu Ala Cys Trp Gly Val Leu 1 5 10 15

Val His Ser Leu Lys Leu Ala Ser Phe His Trp Gly Leu Lys Ser Thr
20 25 30

Ser Thr Pro Thr Leu Val Met Ser Pro Glu Asp Pro Gly Asp Ser Thr 35 40 45

Val Asn Ile Val Ser Thr Leu Leu
50 55

<210> 1033

<211> 4

<212> PRT

<213> Homo sapiens

<400> 1033

Val Trp Met Pro

<210> 1034

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1034

Met Leu Leu Phe His Val Trp Val Asp Leu Ala Cys Trp Gly Val Leu 1 5 10 15

Val His Ser Leu Lys Leu Ala Ser Phe His Trp Gly Leu Lys Ser Thr 20 25 30

Ser Thr Pro Thr Leu Val Met Ser Pro Glu Asp Pro Gly Asp Ser Thr 35 40 45

Val Ash Ile Val Ser Thr Leu Leu 50 55

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<210> 1035
<211> 491
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids
Ala Ala Arg Val Gly Arg His Gly Arg Arg Arg Arg Ser Ala Ala Met
Ala Gly Arg Gly Gly Ser Ala Leu Leu Ala Leu Cys Gly Ala Leu Ala
Ala Cys Gly Trp Leu Leu Gly Ala Glu Xaa Xaa Xaa Pro Gly Ala Pro
Ala Ala Gly Met Arg Arg Arg Arg Leu Gln Glu Asp Gly Ile
Ser Phe Glu Tyr His Arg Tyr Pro Glu Leu Arg Glu Ala Leu Val Ser
Val Trp Leu Gln Cys Thr Ala Ile Ser Arg Ile Tyr Thr Val Gly Arg
                                    90
Ser Phe Glu Gly Arg Glu Leu Leu Val Ile Glu Leu Ser Asp Asn Pro
Gly Val His Glu Pro Gly Glu Pro Glu Phe Lys Tyr Ile Gly Asn Met
                            120
His Gly Asn Glu Ala Val Gly Arg Glu Leu Leu Ile Phe Leu Ala Gln
Tyr Leu Cys Asn Glu Tyr Gln Lys Gly Asn Glu Thr Ile Val Asn Leu
                                       155
Ile His Ser Thr Arg Ile His Ile Met Pro Ser Leu Asn Pro Asp Gly
                165
                                   170
Phe Glu Lys Ala Ala Ser Gln Pro Gly Glu Leu Lys Asp Trp Phe Val
                       185
Gly Arg Ser Asn Ala Gln Gly Ile Asp Leu Asn Arg Asn Phe Pro Asp
```

195 200 205 Leu Asp Arg Ile Val Tyr Val Asn Glu Lys Glu Gly Gly Pro Asn Asn 215 His Leu Leu Lys Asn Met Lys Lys Ile Val Asp Gln Asn Thr Lys Leu 225 230 235 Ala Pro Glu Thr Lys Ala Val Ile His Trp Ile Met Asp Ile Pro Phe Val Leu Ser Ala Asn Leu His Gly Gly Asp Leu Val Ala Asn Tyr Pro Tyr Asp Glu Thr Arg Ser Gly Ser Ala His Glu Tyr Ser Ser Fro Asp Asp Ala Ile Phe Gln Ser Leu Ala Arg Ala Tyr Ser Ser Phe Asn Pro Ala Met Ser Asp Pro Asn Arg Pro Pro Cys Arg Lys Asn Asp Asp 310 315 Asp Ser Ser Phe Val Asp Gly Thr Thr Asn Gly Gly Ala Trp Tyr Ser 325 330 Val Pro Gly Gly Met Gln Asp Phe Asn Tyr Leu Ser Ser Asn Cys Phe 340 345 Glu Ile Thr Val Glu Leu Ser Cys Glu Lys Phe Pro Pro Glu Glu Thr

Leu Lys Thr Tyr Trp Glu Asp Asn Lys Asn Ser Leu Ile Ser Tyr Leu

Glu Gln Ile His Arg Gly Val Lys Gly Phe Val Arg Asp Leu Gln Gly 390 395

Asn Pro Ile Ala Asn Ala Thr Ile Ser Val Glu Gly Ile Asp His Asp 405

Val Thr Ser Ala Lys Asp Gly Asp Tyr Trp Arg Leu Leu Ile Pro Gly

Asn Tyr Lys Leu Thr Ala Ser Ala Pro Gly Tyr Leu Ala Ile Thr Lys

Lys Val Ala Val Pro Tyr Ser Pro Ala Ala Gly Val Asp Phe Glu Leu 455

Glu Ser Phe Ser Glu Arg Lys Glu Glu Glu Lys Glu Glu Leu Met Glu 470 475

Trp Trp Lys Met Met Ser Glu Thr Leu Asn Phe 485

<210> 1036 <211> 255

<212> PRT

<213> Homo sapiens

<400> 1036

Leu Leu Trp Thr Met Ser Val Ile Phe Phe Ala Cys Val Val Arg
1 5 10 15

Val Arg Asp Gly Leu Pro Leu Ser Ala Ser Thr Asp Phe Tyr His Thr 20 25 30

Gln Asp Phe Leu Glu Trp Arg Arg Leu Lys Ser Leu Ala Leu Arg 35 40 45

Leu Ala Gln Tyr Pro Gly Arg Gly Ser Ala Glu Gly Cys Asp Phe Ser 50 55 60

Ile His Phe Ser Ser Phe Gly Asp Val Ala Cys Met Ala Ile Cys Ser 65 . 70 75 80

Cys Gln Cys Pro Ala Ala Met Ala Phe Cys Phe Leu Glu Thr Leu Trp 85 90 95

Trp Glu Phe Thr Ala Ser Tyr Asp Thr Thr Cys Ile Gly Leu Ala Ser 100 105 110

Arg Pro Tyr Ala Phe Leu Glu Phe Asp Ser Ile Ile Gln Lys Val Lys 115 120 125

Trp His Phe Asn Tyr Val Ser Ser Ser Gln Met Glu Cys Ser Leu Glu 130 135 140

Lys Ile Gln Glu Glu Leu Lys Leu Gln Pro Pro Ala Val Leu Thr Leu 145 150 155 160

Glu Asp Thr Asp Val Ala Asn Gly Val Met Asn Gly His Thr Pro Met 165 170 175

His Leu Glu Pro Ala Pro Asn Phe Arg Met Glu Pro Val Thr Ala Leu 180 185 190

Gly Ile Leu Ser Leu Ile Leu Asn Ile Met Cys Ala Ala Leu Asn Leu 195 200 205

Ile Arg Gly Val His Leu Ala Glu His Ser Leu Gln Val Ala His Glu 210 215 220

Glu Ile Gly Asn Ile Leu Ala Phe Leu Val Pro Phe Val Ala Cys Ile 225 230 235 240

Phe Gln Asp Pro Arg Ser Trp Phe Cys Trp Leu Asp Gln Thr Ser 245 250 255

<210> 1037

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1037

Met Leu Leu Leu Val Phe Leu Val Ala Cys Phe Ile Asn Arg Lys 1 5 10 15

Cys Gln Lys Gln Arg Lys Lys Lys Pro Ala Glu Asp Ile Leu Glu Glu 20 25 30

Tyr Pro Leu Asn Thr Lys Val Glu Val Pro Lys Xaa His Pro Asp Arg 35 40 45

Val Glu Lys Asn Val Asn Arg His Tyr Cys Thr Val Arg Asn Val Asn 50 55 60

Ile Leu Ser Glu Pro Glu Ala Ala Tyr Thr Phe Lys Gly Ala Lys Val 65 70 75 80

Lys Arg Leu Asn Leu Glu Val Arg Val His Asn Asn Leu Gln Asp Gly 85 90 95

Thr Glu Val

<210> 1038

<211> 5

<212> PRT

<213> Homo sapiens

<400> 1038

Met Pro Val Leu Leu

<210> 1039

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1039

Met Leu Leu Leu Val Phe Leu Val Ala Cys Phe Ile Asn Arg Lys
1 5 10 15

Cys Gln Lys Gln Arg Lys Lys Lys Pro Ala Glu Asp Ile Leu Glu Glu 20 25 30

Tyr Pro Leu Asn Thr Lys Val Glu Val Pro Lys Arg His Pro Asp Arg 35 40 45

Val Glu Lys Asn Val Asn Arg His Tyr Cys Thr Val Arg Asn Val Asn 50 55 60

Ile Leu Ser Glu Pro Glu Ala Ala Tyr Thr Phe Lys Gly Ala Lys Val 65 70 75 80

Lys Arg Leu Asn Leu Glu Val Arg Val His Asn Asn Leu Gln Asp Gly 85 90 95

Thr Glu Val

<210> 1040

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1040

Leu Leu Asp Leu Thr Asn Arg Leu Val Thr Cys Ile Asp Gln Ser Lys

1 5 10 15

Pro Asn Ile Leu Ala Ser Leu Ser Leu Ala Glu Gln Thr Arg Val Gly
20 25 30

Ile Trp Val Gly Ala Phe Ser Ile Lys Asp Asn Leu Ser Leu Cys Ser 35 40 45

Gln Gly Glu His Leu Cys Phe Val Leu Lys Ala Gly Ser Pro Trp Phe 50 55 60

Ala Asn Cys Leu Gln Glu

<210> 1041

<211> 48

<212> PRT

<213> Homo sapiens

<400> 1041

Met Leu Gln Tyr Thr Trp Leu Ile Leu Val Phe Leu Ser Ser Cys Leu 1 5 10 15

Ser Ala Thr Trp Phe Cys Lys Val Val Val Ala Ala Ile Gly Ser Thr 20 25 30

Val Gly Ser Ser Arg Leu His Phe Lys Arg Ser Gly Gln Cys Leu Arg 35 40 45

<210> 1042

<211> 48

<212> PRT

<213> Homo sapiens

<400> 1042

Met Leu Gln Tyr Thr Trp Leu Ile Leu Val Phe Leu Ser Ser Cys Leu 1 5 10 15

Ser Ala Thr Trp Phe Cys Lys Val Val Val Ala Ala Ile Gly Ser Thr  $20 \\ 25 \\ 30$ 

Val Gly Ser Ser Arg Leu His Phe Lys Arg Ser Gly Gln Cys Leu Arg 35 40 45

<210> 1043

<211> 52

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1043

Met Val Ala Val Asp Phe Ser Cys Leu Ser Phe Ile Leu Leu Gly Ile
1 5 10 15

Leu Val Leu Tyr Ile Tyr Phe Val Met Tyr Ala Cys Ser Ile Pro Thr 20 25 30

Leu Phe Ser Val Phe Tyr Xaa Glu Glu Met Leu Asn Leu Ser Lys Leu 35 40 45

Ser Cys Ile Tyr 50

<210> 1044

<211> 13

<212> PRT

<213> Homo sapiens

<400> 1044

Cys Phe His Phe Phe Leu Cys Pro Ile Leu Val Leu Val 1

<210> 1045

<211> 1

<212> PRT

<213> Homo sapiens

<400> 1045

Cys

1

<310> 1046

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1046

Met Val Ala Val Asp Phe Ser Cys Leu Ser Phe Ile Leu Leu Gly Ile 1 5 10 15

Leu Val Leu Tyr Ile Tyr Phe Val Met Tyr Ala Cys Ser Ile Pro Thr  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Leu Phe Ser Val Leu 35

<210> 1047

<211> 6

<212> PRT

<213> Homo sapiens

<400> 1047

Asn Leu Ser Lys Ile Ile
1 5

<210> 1048

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1048

Met Met Asn Val Ser Lys Ile Ser Phe Phe Ala Met Phe Leu Met Tyr

1 10 15

Leu Leu Ala Ala Leu Phe Gly Tyr Leu Thr Phe Tyr Glu His Val Glu 20 25 30

Ser Glu Leu Leu His Thr Tyr Ser Ser Ile Leu Gly Thr Asp Ile Leu 35 40 45

Leu Leu Ile Val Arg Leu Ala Val Leu Met Ala Val Thr Leu Thr Val
50 60

Pro Val Val Ile Phe Pro Ile Arg Ser Ser Val Thr His Leu Leu Cys 65 70 75 80

Ala Ser Lys Asp Phe Ser Trp Trp Arg His Ser Leu Ile Thr Val Ser 85 90 95

Ile Leu Ala Phe Thr Asn Leu Leu Val Ile Phe Val Pro Thr Ile Arg 100 105 110

Asp Ile Phe Gly Phe Ile Gly Ala Ser Ala Ala Ser Met Leu Ile Phe 115 120 125

Ile Leu Pro Ser Ala Phe Tyr Ile Lys Leu Val Lys Lys Glu Pro Met
130 135 140

Lys Ser Val Gln Lys Ile Gly Ala Leu Phe Phe Leu Leu Ser Gly Val

145 150 155 160

Leu Val Met Thr Gly Ser Met Ala Leu Ile Val Leu Asp Trp Val His 165 170 175

Asn Ala Pro Gly Gly His 180

<210> 1049

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1049

Met Met Asn Val Ser Lys Ile Ser Phe Phe Ala Met Phe Leu Met Tyr  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Leu Ala Ala Leu Phe Gly Tyr Leu Thr Phe Tyr Glu His Val Glu  $20 \\ 25 \\ 30$ 

Ser Glu Leu Leu His Thr Tyr Ser Ser Ile Leu Gly Thr Asp Ile Leu 35 40 45

Leu Leu Ile Val Arg Leu Ala Val Leu Met Ala Val Thr Leu Thr Val 50 60

Pro Val Val Ile Phe Pro Ile Arg Ser Ser Val Thr His Leu Leu Cys
65 70 75 80

Ala Ser Lys Asp Phe Ser Trp Trp Arg His Ser Leu Ile Thr Val Ser 85 90 95

Ile Leu Ala Phe Thr Asn Leu Leu Val Ile Phe Val Pro Thr Ile Arg  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

Asp Ile Phe Gly Phe Ile Gly Ala Ser Ala Ala Ser Met Leu Ile Phe 115 120 125

Ile Leu Pro Ser Ala Phe Tyr Ile Lys Leu Val Lys Lys Glu Pro Met 130 135 140

Lys Ser Val Gln Lys Ile Gly Ala Leu Phe Phe Leu Leu Ser Gly Val 145 150 155 160

Leu Val Met Thr Gly Ser Met Ala Leu Ile Val Leu Asp Trp Val His
165 170 175

Asn Ala Pro Gly Gly His 180

<210> 1050

<211> 31

<212> PRT

<213> Homo sapiens

<220>

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<221> SITE
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<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1050

Pro Gly Pro Pro Leu Ser Phe Phe Phe Phe Phe Phe Phe Phe Phe 1 5 10 15

Phe Phe Phe Phe Phe Phe Lys His Cys Ile Gln Val Ser Leu 20 25 30 ·

<210> 1051

<211> 63

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1051

Met Asn His Cys Cys Ser Ser Gln Arg Phe Leu Asn Ile Leu Ser Phe 1 5 10 15

Cys Ile Ser Pro Pro Phe Pro Leu Thr Phe Ile Tyr Leu Ile Met Tyr 20 25 30

Leu Phe Ile Tyr Leu Tyr Thr Phe Ala Pro Phe Ser Thr Asn Thr Lys
35 40 45

Gln Ser Lys Lys Xaa Tyr Ile Tyr Ile Ser Val Tyr Val Leu 50 55 60

<210> 1052

<211> 63

<212> PRT '

<213> Homo sapiens

<400> 1052

Met Asn His Cys Cys Ser Ser Gln Arg Phe Leu Asn Ile Leu Ser Phe 1 5 10 15

Cys Ile Ser Pro Pro Phe Pro Leu Thr Phe Ile Tyr Leu Ile Met Tyr 20 25 30

Leu Phe Ile Tyr Leu Tyr Thr Phe Ala Pro Phe Ser Thr Asn Thr Lys
35 40 45

Gln Ser Lys Lys Lys Tyr Ile Tyr Ile Ser Val Tyr Val Leu 50 60

<210> 1053

<211> 75

<210> PRT <213> Homo sabiens <220> <221> SITE <222> (9) <223> Kaa equals any of the naturally occurring L-amino acids Ala Asp Asn Asn Phe Thr Gln Glu Xaa Ala Met Thr Met Ile Thr Pro 5 10 Ser Ser Lys Leu Thr Leu Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Asp Asn Gln Phe Ile Leu Leu Asn Trp His Ile Leu Asn His Asp Ser Gln Gln Leu Gly Asn Ile Phe Phe 70 <210> 1054 <211> 113 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (31) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (79) <223> Xaa equals any of the naturally occurring L-amino acids <2220> <221> SITE <222> (102) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (111) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1054 Cys Gly Val Phe Trp Leu Leu Ser Leu Leu Cys Cys Ile Lys Glu Gln Gln Phe Glu Gln Val Val Ala Leu Leu Leu Gln Ser Ile Arg Xaa Cys

45

Gln Asp Arg Ala Leu Leu Val Asn Asn Ala Tyr Gln Gly Leu Ala Ser

40

35

Leu Val Lys Val Ser Glu Leu Ala Ala Phe Lys Val Val Gln Glu 50 55 60

Glu Gly Gly Ser Gly Leu Ser Leu Ile Lys Glu Thr Tyr Gln Xaa His 65 70 75 80

Arg Gly Arg Thr Arg Arg Trp Trp Glu Asn Val Gly Met Leu Val 85 90 95

Pro Pro Gly Phe Leu Xaa Arg Arg Ser Cys Arg Ser Trp Cys Xaa Val 100 105 110

Val

<210> 1055

<211> 2

<212> PRT

<213> Homo sapiens

<400> 1055

Ile Leu

1

<210> 1056

<211> 161

<212> PRT

<213> Homo sapiens

<400> 1056

Cys Ile Lys Glu Gln Gln Phe Glu Gln Val Val Ala Leu Leu Gln
20 25 30

Ser Ile Arg Leu Cys Gln Asp Arg Ala Leu Leu Val Asn Asn Ala Tyr

Gln Gly Leu Ala Ser Leu Val Lys Val Ser Glu Leu Ala Ala Phe Lys 50 55 60

Val Val Glu Glu Glu Gly Gly Ser Gly Leu Ser Leu Ile Lys Glu 65 70 75 80

Thr Tyr Gln Leu His Arg Asp Pro Glu Val Val Glu Asn Val Gly 85 90 95

Met Leu Val His Leu Ala Ser Tyr Glu Glu Ile Leu Pro Glu Leu 100 105 110

Val Ser Ser Ser Met Lys Ala Leu Leu Gln Glu Ile Lys Glu Arg Phe 115 120 125

Thr Ser Ser Leu Glu Leu Val Ser Cys Val Glu Lys Val Leu Leu Arg

130 135 140

Leu Glu Ala Ala Thr Ser Pro Ser Pro Leu Gly Gly Glu Ala Ala Gln
145 150 155 160

Pro

<210> 1057

<211> 491

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1057

Ala Ala Arg Val Gly Arg His Gly Arg Arg Arg Arg Ser Ala Ala Met
1 5 10 15

Ala Gly Arg Gly Gly Ser Ala Leu Leu Ala Leu Cys Gly Ala Leu Ala 20 25 30

Ala Cys Gly Trp Leu Leu Gly Ala Glu Xaa Xaa Yaa Pro Gly Ala Pro 35 40 45

Ala Ala Gly Met Arg Arg Arg Arg Leu Gln Gln Glu Asp Gly Ile 50 55

Ser Phe Glu Tyr His Arg Tyr Pro Glu Leu Arg Glu Ala Leu Val Ser 65 70 75 80

Val Trp Leu Gln Cys Thr Ala Ile Ser Arg Ile Tyr Thr Val Gly Arg  $85\ \cdot \ 90\ 95$ 

Ser Phe Glu Gly Arg Glu Leu Leu Val Ile Glu Leu Ser Asp Asn Pro 100 105 119

Gly Val His Glu Pro Gly Glu Pro Glu Phe Lys Tyr Ile Gly Asn Met 115 120 125

His Gly Asn Glu Ala Val Gly Arg Glu Leu Leu Ile Phe Leu Ala Gln 130 135 140

Tyr Leu Cys Asn Glu Tyr Gln Lys Gly Asn Glu Thr Ile Val Asn Leu 145 150 155 160

| Ile        | His        | Ser        | Thr        | Arg<br>165 | Ile        | His        | Ile        | Met        | Pro<br>170 | Ser        | Leu        | Asn        | Pro        | Asp<br>175 | Gly        |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Phe        | Glu        | Lys        | Ala<br>180 | Ala        | Ser        | Gln        | Pro        | Gly<br>185 | Glu        | Leu        | Lys        | Asp        | Trp<br>190 | Phe        | Val        |
| Gly        | Arg        | Ser<br>195 | Asn        | Ala        | Gln        | Gly        | Ile<br>200 | Asp        | Leu        | Asn        | Arg        | Asn<br>205 | Phe        | Pro        | Asp        |
| Leu        | Asp<br>210 | Arg        | Ile        | Val        | Tyr        | Val<br>215 | Asn        | Glu        | Lys        | Glu        | Gly<br>220 | Gly        | Pro        | Asn        | Asn        |
| His<br>225 | Leu        | Leu        | Lys        | Asn        | Met<br>230 | Lys        | Lys        | Ile        | Val        | Asp<br>235 | Gln        | Asn        | Thr        | Lys        | Leu<br>240 |
| Ala        | Pro        | Glu        | Thr        | Lys<br>245 | Ala        | Val        | Ile        | His        | Trp<br>250 | Ile        | Met        | Asp        | Ile        | Pro<br>255 | Phe        |
| Val        | Leu        | Ser        | Ala<br>260 | Asn        | Leu        | His        | Gly        | Gly<br>265 | Asp        | Leu        | Val        | Ala        | Asn<br>270 | Tyr        | Pro        |
| Tyr        | Asp        | Glu<br>275 | Thr        | Arg        | Ser        | Gly        | Ser<br>280 | Ala        | His        | Glu        | Tyr        | Ser<br>285 | Ser        | Ser        | Pro        |
| Asp        | Asp<br>290 | Ala        | Ile        | Phe        | Gln        | Ser<br>295 | Leu        | Ala        | Arg        | Ala        | Tyr<br>300 | Ser        | Ser        | Phe        | Asn        |
| Pro<br>305 |            | Met        | Ser        | Asp        | Pro<br>310 | Asn        | Arg        | Pro        | Pro        | Cys<br>315 | Arg        | Lys        | Asn        | Asp        | Asp<br>320 |
| Asp        | Ser        | Ser        | Phe        | Val<br>325 | Asp        | Gly        | Thr        | Thr        | Asn<br>330 | Gly        | Gly        | Ala        | Trp        | Tyr<br>335 | Ser        |
| Val        | Pro        | Gly        | Gly<br>340 | Met        | Gln        | Asp        | Phe        | Asn<br>345 | Tyr        | Leu        | Ser        | Ser        | Asn<br>350 | Суз        | Phe        |
| Glu        | Ile        | Thr<br>355 |            | Glu        | Leu        | Ser        | Cys<br>360 | Glu        | Lys        | Phe        |            | Pro<br>365 | Glu        | Glu        | Thr        |
| Leu        | Lys<br>370 | Thr        | Tyr        | Trp        | Glu        | Asp<br>375 | Asn        | Lys        | Asn        | Ser        | Leu<br>380 | Ile        | Ser        | Tyr        | Leu        |
| Glu<br>385 | Gln        | Ile        | His        | Arg        | Gly<br>390 | Val        | Lys        | Gly        | Phe        | Val<br>395 | Arg        | Asp        | Leu        | Gln        | Gly<br>400 |
| Asn        | Pro        | Ile        | Ala        | Asn<br>405 | Ala        | Thr        | Ile        | Ser        | Val<br>410 | Glu        | Gly        | Ile        | Asp        | His<br>415 | Asp        |
| Val        | Thr        | Ser        | Ala<br>420 | Lys        | Asp        | Gly        | Asp        | Tyr<br>425 | Trp        | Arg        | Leu        | Leu        | Ile<br>430 | Pro        | Gly        |
| Asn        | Tyr        | Lys<br>435 | Leu        | Thr        | Ala        | Ser        | Ala<br>440 | Pro        | Gly        | Tyr        | Leu        | Ala<br>445 | Ile        | Thr        | Lys        |
| Lys        | Val<br>450 | Ala        | Val        | Pro        | Туr        | Ser<br>455 | Pro        | Ala        | Ala        | Gly        | Val<br>460 | Asp        | Phe        | Glu        | Leu        |
| Glu<br>465 | Ser        | Phe        | Ser        | Glu        | Arg<br>470 | Lys        | Glu        | Glu        | Glu        | Lys<br>475 | Glu        | Glu        | Leu        | Met        | Glu<br>480 |

Trp Trp Lys Met Met Ser Glu Thr Leu Asn Phe 495

<210> 1058 <011> 79 <212> PRT <213> Homo sapiens <220> <321> SITE <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <320> <221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (66) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1058 Met Arg Leu Ala Ser Ser Leu Ser Val Phe Pro Leu Leu Pro Xaa Thr 10 Cys Gly His Ser Xaa Ala Leu Leu Pro Ser Ser Ile Gly Gln His Ser 2.0 Glu Thr Phe Thr Arg Cys Arg Pro Leu Thr Phe Pro Val Phe Arg Thr 40 Xaa Lys Pro Met Asn Pro Tyr Glu Ile Thr Gln Phe Cys Gly Ile Leu 50 Xaa Xaa Ala Thr Gln Thr Gly Leu Lys Thr Gly Thr Leu His Gly 55 75

<310> 1059

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1059

Arg Glu Lys Ser Ser Leu Ser Val Pro Val Leu Val Cys Leu Cys Cys
1 5 10 15

Tyr Asn Arg Ile 20

<210> 1060

<211> 244

<212> PRT

<213> Homo sapiens

<400> 1060

Leu Val Pro Leu Val Phe Ser Leu Leu Val Gln Ser Cys Lys Gln Val 1 5 10 15

Tyr Arg Ser Ile Ala Met Lys Phe Val Pro Cys Leu Leu Val Thr  $20 \\ 25 \\ 30$ 

Leu Ser Cys Leu Gly Thr Leu Gly Gln Ala Pro Arg Gln Lys Gln Gly 35 40 45

Ser Thr Gly Glu Glu Phe His Phe Gln Thr Gly Gly Arg Asp Ser Cys 50 55 60

Thr Met Arg Pro Ser Ser Leu Gly Gln Gly Ala Gly Glu Val Trp Leu 65 70 75 80

Arg Val Asp Cys Arg Asn Thr Asp Gln Thr Tyr Trp Cys Glu Tyr Arg 85 90 95

Gly Gln Pro Ser Met Cys Gln Ala Phe Ala Ala Asp Pro Lys Ser Tyr 100 105 110

Trp Asn Gln Ala Leu Gln Glu Leu Arg Arg Leu His His Ala Cys Gln
115 120 125

Gly Ala Pro Val Leu Arg Pro Ser Val Cys Arg Glu Ala Gly Pro Gln 130 135 140

Ala His Met Gln Gln Val Thr Ser Ser Leu Lys Gly Ser Pro Glu Pro 145 150 155 160

Asn Gln Gln Pro Glu Ala Gly Thr Pro Ser Leu Arg Pro Lys Ala Thr

Val Lys Leu Thr Glu Ala Thr Gln Leu Gly Lys Asp Ser Met Glu Glu
180 185 190

Leu Gly Lys Ala Lys Pro Thr Thr Arg Pro Thr Ala Lys Pro Thr Gln
195 200 205

Pro Gly Pro Arg Pro Gly Gly Asn Glu Glu Ala Lys Lys Lys Ala Trp

Glu His Cys Trp Lys Pro Phe Gln Ala Leu Cys Ala Phe Leu Ile Ser 225 230 235 240

Phe Phe Arg Gly

<210> 1061

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1061

Met Arg Leu Ala Ser Ser Leu Ser Val Phe Pro Leu Leu Pro Leu Thr 1 5 10 15

Cys Gly His Ser Leu Ala Leu Leu Pro Ser Ser Ile Gly Gln His Ser 20 25 30

Glu Thr Phe Thr Arg Cys Arg Pro Leu Thr Phe Pro Val Phe Arg Thr 35 40 45

Ile Asn Gln Val Asn Pro Tyr Lys Ser Pro Ser Leu Trp Tyr Ser Val 50 55 60

Ile Ala Thr Gln Thr Asp 65 70

<210> 1062

<211> 304

<212> PRT

<213> Homo sapiens

<400> 1062

Thr Cys Pro Leu Leu Arg Asn Ser Ser His Ala Glu Pro Ala His Arg 1 5 10 15

Gln Asp Gly Asp Leu Ala Leu Thr Pro Cys Leu Gly Pro Gly Leu Gly 20 25 30

Asn Pro Gly Arg Val Arg Gln Lys Ala Gly Asn Arg Ser Ser Gly Gly 35 40 45

Tyr Ser Leu Arg Gly Gln Gln His Leu Gly Pro Leu Leu Ala Thr 50 55 60

Ala Gly Ala Ala Gly Ala Arg Glu Arg Gly Gln Ala Leu His Gly Val 65 70 75 80

Glu Met Val Ala Val Arg Ala Asp Val Trp His Val Arg Gly Arg Trp 85 90 95 .

Arg Gln Leu Gly His Arg Pro Val Ala Arg Leu His Gln Leu Phe Ala 100 105 110

Val Val Leu Phe Gln Gln Leu Leu Gln Gly Arg Ser Ile Leu Phe Leu 115 120 125

Leu Cys Asp Gln Ala His Gln Asp Pro Asn Gly Val Leu Ile Gly Ile 130 135 140

Leu Ser Pro Val Gly Arg Val Asp Ser Thr Ala Ser Thr Ser Arg Ala 145 150 155 160

Gly Pro Asp Leu Leu Val Arg Arg Ala Val Val Ala Leu Pro Leu Glu 165 170 175

Glu Val Ala His Gln Asp Ala Gln Gln Pro His Glu Ala Glu Asp Arg 180 185 190

Asp Asp Gly Asp Asp Arg Val Leu Gly Gly Cys Leu Leu Trp Ala Thr 195 200 205

Cys Pro Gly Ala Val Pro Arg Leu Pro Cys Leu Thr Thr Ala Ala Gly 210 215 220

Pro Cys Cys His Leu His Ala Thr Ser Gly Pro Pro Pro Pro Leu Ile 225 230 235 240

Thr Ala Met Ser Thr Gln Arg Cys Pro Gly Thr Trp Leu Thr Trp Asn 245 250 255

Ala Gly Asn Pro Pro Arg Pro Lys Pro Pro Arg Pro Ala Val Ser Thr 260 265 270

Glu Cys Ile Ser Ser Cys His Ala His Leu Gly Leu Gln Pro Pro Pro 275 280 285

Lys Ala Ala Thr Gly Met Gly Leu Ala Trp Ala Gly Ala Pro Cys Ser 290 295 300

<210> 1063

<211> 52

<212> PRT

<213> Homo sapiens

<400> 1063

Met Gly Gly Cys Leu Leu Ser Leu Ser Leu Cys Phe Val Pro Val Val
1 5 10 15

Arg Leu Ala Ala Ser Val Ala Arg Trp Ala Trp Leu Glu Pro Trp Val 20 25 30

Arg Gln Val Ala Gly Gly Asp Arg Glu Arg Leu Arg Gly Lys Trp Trp 35 40 45

His Leu Leu Leu 50

<210> 1064

<211> 52

<212> PRT

<213> Homo sapiens

<400> 1054 Met Gly Gly Cys Leu Leu Ser Leu Ser Leu Cys Phe Val Pro Val Val 10 Arg Leu Ala Ala Ser Val Ala Arg Trp Ala Trp Leu Glu Pro Trp Val Arg Gln Val Ala Gly Gly Asp Arg Glu Arg Leu Arg Gly Lys Trp Trp 40 His Leu Leu Leu 50 <210> 1065 <211> 58 <212> PRT <213> Homo sapiens <400> 1065 Asp Leu Ser Gly Gly Glu Trp Asn Val Thr Thr Arg Thr Arg Leu Trp Glu Ile Gln Pro His Leu Cys Phe Val Met Ile Leu Lys Leu Asp Phe 20 Ser Cys Arg Asp Phe Leu Ser Ile Leu Pro Gly Val Leu Thr Tyr Ser Leu Pro Val Lys Arg Phe Lys Lys Asn 55 50 <210> 1066 <211> 21 <212> PRT <213> Homo sapiens <400> 1066 Cys Phe Phe Gln Leu Ser Pro Glu Glu Val Ser Trp Cys Pro Asn Val 10 Gly Ser Ser Phe Asp 20 <210> 1067 <211> 37 <212> PRT <213> Homo sapiens

<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Maa equals any of the naturally occurring L-amino acids
<400> 1067

Met Gly Lys Leu Xaa Leu Thr Leu Leu Cys Leu Leu Gln Leu Leu 1 5 10 15

Pro Pro Glu Val Tyr Tyr Ser Arg Trp Gly Ala Asn Met Met Ala Gln 20 25 30

Thr Pro Leu Asn Pro 35

<210> 1068

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1068

Met Gly Lys Leu Thr Leu Thr Leu Leu Cys Leu Leu Gln Leu Leu 1 5 10 15

Pro Pro Glu Val Tyr Tyr Ser Arg Trp Gly Ala Asn Met Met Ala Gln
20 25 30

Thr Pro Leu Asn Ser Met Arg Ser Pro Trp Pro Met Glu Ile Leu Leu 35 40 45

Phe Phe Pro Leu Phe Ser Ser Ser Val Phe Ile Gly Ser Ala 50 55 60

<210> 1069

<211> 63

<212> PRT

<213> Homo sapiens

<400> 1069

Met Ser Leu Asp Ser Leu Val Leu Val Lys Ala Leu Phe Cys Phe Thr
1 5 10 15

Phe Val Val Gln Ile Thr Leu Ser Asn Ile Ser Ser Thr Asn Val Ser 20 25 30

Ile Leu Val Phe Val His Thr Ala Ile Thr Ser Pro Leu Gln Thr Phe
35 40 45

Gln Phe Trp His Tyr Glu Glu Val Ala Val Asn Leu Lys Tyr Leu 50 55 60

<210> 1070

<211> 63

<212> PRT

<213> Homo sapiens

<400> 1070

Met Ser Leu Asp Ser Leu Val Leu Val Lys Ala Leu Phe Cys Phe Thr

Phe Val Val Gln Ile Thr Leu Ser Asn Ile Ser Ser Thr Asn Val Ser 25 Ile Leu Val Phe Val His Thr Ala Ile Thr Ser Pro Leu Gln Thr Phe 40 Gln Phe Trp His Tyr Glu Glu Val Ala Val Asn Leu Lys Tyr Leu <210> 1071 <211> 2 <212> PRT <213> Homo sapiens <400> 1071 Leu Gln 1 <210> 1072 <211> 2 <212> PRT <213> Homo sapiens <400> 1072 Leu Gln 1 <210> 1073 <211> 48 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (42) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (44) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1073 Met Gly Leu Arg Gln Gln Leu Glu Leu Lys Leu Lys Leu Ile Leu Leu 10 Leu Cys Val Phe Trp Phe Lys Ser Cys Thr Tyr Ile Leu Ala Leu Leu

25

2.0

Phe Leu Tyr Ser Gly Xaa Met Trp Val Xaa His Xaa Gly Arg Lys Ile 35 40 45

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<210> 1074
<211> 261
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (239)
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<221> SITE
<222> (240)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (253)
<223> Xaa equals any of the naturally occurring L-amino acids
 <400> 1074
 Thr Val Ala Asp Val Arg Arg Pro Phe Ala Gln Val Asn Val Leu Ala
Glu Glu Val Leu Ile Tyr Arg Ile Val Leu Asn Asp Ile Val Gly Asp
Val Val Gln Asp His Gln Val Arg Leu Arg Arg Lys Asp Asp Ala Val
          35
                              40
                                                   45
 Ile Arg Gln Leu Glu Ala Thr Met Leu Val Gly Arg Lys His Arg His
                          55
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WO 01/77137 PC F/U 801/11988

| Gly<br>65  | Asp        | Val        | Leu        | Val        | Arg<br>70  | Glu        | Thr        | Thr        | Val        | Ser<br>75  | Asp        | Ala        | Arg        | Pro        | Glu<br>80  |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asp        | Arg        | Va1        | His        | Phe<br>85  | Arg        | His        | Val        | Cys        | Xaa<br>90  | Pro        | Gln        | Xaa        | Lys        | Arg<br>95  | Val        |
| Ser        | Leu        | Leu        | Asp<br>100 | Val        | Val        | Ile        | Ala        | Ala<br>105 | His        | Arg        | Leu        | Ile        | His<br>110 | Thr        | Lys        |
| Gly        | Thr        | His<br>115 | Lys        | Ala        | Asn        | Tyr        | Cys<br>120 | Arg        | Arg        | His        | Thr        | Val<br>125 | Thr        | Arg        | Val        |
| Arg        | Val<br>130 | Asp        | Val        | Val        | Arg        | Thr<br>135 | Glu        | Ala        | Arg        | Phe        | Lys<br>140 | Gln        | Leu        | Gly        | Arg        |
| Gly<br>145 | Ile        | Thr        | Phe        | Pro        | Asp<br>150 | Ser        | Pro        | Leu        | Thr        | Arg<br>155 | Thr        | Glu        | His        | Thr        | Asp<br>160 |
| Arg        | Phe        | Arg        | Pro        | Phe<br>165 | Phe        | Phe        | Gln        | Xaa        | Gly<br>170 | Phe        | Glu        | Phe        | Leu        | Phe<br>175 | His        |
| His        | Ile        | Glu        | Gly<br>180 | Leu        | Ile        | Pro        | Gly        | Asp<br>185 | Trp        | Gly        | Lys        | Phe        | Ala<br>190 | Phe        | Ph∈        |
| Val        | Ile        | Phe<br>195 | Thr        | Val        | Phe        | His        | Thr<br>200 | Gln        | Gln        | Arg        | Leu        | Arg<br>205 | Gln        | Thr        | Val        |
| Phe        | Thr<br>210 | Val        | His        | Asp        | Phe        | Gly<br>215 | Gln        | Glu        | Ile        | Ala        | Leu<br>220 | Asn        | Ala        | Val        | Gln        |
| Ala<br>225 | Thr        | Val        | Asn        | Arg        | Суs<br>230 | Val        | Arg        | Val        | Ala        | Leu<br>235 | Thr        | Xaa        | Gln        | Xaa        | Xaa<br>240 |
| Val        | Pro        | Ala        | Ala        | Phe<br>245 | Arg        | Pro        | Glu        | Arg        | Arg<br>250 | Asn        | Gln        | Xaa        | Arg        | Arg<br>255 | Thr        |
| Thr        | Gln        | Phe        | Ala<br>260 | Ile        |            |            |            |            |            |            |            |            |            |            |            |

<210> 1075 <211> 61 <212> PRT <213> Homo sapiens

<400> 1075

Phe Tyr Thr Asn Val Thr Tyr Lys Ser Asp Ala Thr Thr Leu Arg Phe 1 5 10 15

Pro Gly Arg Cys Asp Phe Ser Ser Ala Trp Glu Val Asp Leu His Gln

Pro Phe Gln Cys Ser Ala His Pro Gly Ala Gly Ile Thr Ala Pro His 35 40 45

Leu Leu Gly Glu Lys Pro Gly Arg Pro Glu Glu Val Gly 50 55 60

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<210> 1076
<211> 54
<212> PRT
<213> Homo sapiens
<400> 1076
Met Gly Leu Arg Gln Gln Leu Glu Leu Lys Leu Ile Leu Leu
Leu Cys Val Phe Trp Phe Lys Ser Cys Thr Tyr Ile Leu Ala Leu Leu
                                 25
Phe Ser Val Val Pro Glu Arg Trp Trp Val Ala Ile Leu Val Gly Lys
Ser Glu Phe Ser Tyr Leu
     50
<210> 1077
<211> 5
<212> PRT
<213> Homo sapiens
<400> 1077
Gln Tyr Leu Leu Ile
<210> 1078
<211> 30
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1078
Met Xaa Ala Ser Gln Tyr Ile Leu Phe Phe Leu Gln Xaa Leu Gly Xaa
Lys Leu Gln Phe Gln Gly Ile Ser Ser Gln Gln Gln Val Glu
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<210> 1079
<211> 30
<212> PRT
<213> Homo sapiens
<400> 1079
Met Arg Ala Ser Gln Th
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Met Arg Ala Ser Gln Tyr Ile Leu Phe Phe Leu Gln Phe Leu Gly Phe
1 5 10 15

<210> 1080 <211> 7 <212> PRT <213> Homo sapiens <400> 1080 Met Phe Gly Cys Pro Phe Cys 1 5

<210> 1081
<211> 261
<212> PRT
. <213> Homo sapiens

<400> 1081
Gly Ile Phe Arg Ser Leu Arg Val Leu Phe Pro Leu Phe Ser Val Gly
1 5 10 15

Arg Pro Gln Phe Ala Arg Ser Leu Ser Ala Ala Pro Gln Leu Ser Asp 20 25 30

Thr Ala Asp Thr Met Gly Phe Gly Asp Leu Lys Ser Pro Ala Gly Leu 35 40 45

Gln Val Leu Asn Asp Tyr Leu Ala Asp Lys Ser Tyr Ile Glu Gly Tyr 50 55 60

Val Pro Ser Gln Ala Asp Val Ala Val Phe Glu Ala Val Ser Ser Pro 65 70 75 80

Pro Pro Ala Asp Leu Cys His Ala Leu Arg Trp Tyr Asn His Ile Lys 85 90 95

Ser Tyr Glu Lys Glu Lys Ala Ser Leu Pro Gly Val Lys Lys Ala Leu 100 105 110

Gly Lys Tyr Gly Pro Ala Asp Val Glu Asp Thr Thr Gly Ser Gly Ala 115 120 125

Thr Asp Ser Lys Asp Asp Asp Asp Ile Asp Leu Phe Gly Ser Asp Asp 130 135 140

## MISSING AT THE TIME OF PUBLICATION

Gly Gly Glu Arg His Leu His Arg Thr His Pro Arg Leu Pro Gly His 1 5 10 15

Arg Phe Leu Arg Leu His Arg Ala Pro Arg Val Pro His Val Cys Gly
20 25 30

Val Arg Ala His Gly Ala Gly Val Pro His Leu Val Ser Gly Gly Asp 35 40 45

Glu Val Ser Pro Gly Gly Ala Gly Pro Val Ser His Ser Ala Glu Glu 50 55 60

Gln Pro Val His Gln Val Asp Arg Leu Cys Gly Ala Cys Pro Gly Gln 65 70 75 80

Arg Val Phe Leu Cys Pro Gly Glu Pro Gly Ala Lys Ser Gly Arg His 85 90 95

Leu Ser Gly Gly Val Pro Pro Tyr Thr Glu Cys Asp His Ala Gln Pro 100 105 110

Leu Ala Arg Pro Gly Ala Val Glu Ser Cys Asn His Glu Val Cys Ala 115 120 125

Gln Thr Gly Glu Thr Val Gln Pro Leu Met Ala Arg Arg 130 135 140

<210> 1085

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1085

Met Ser Met Lys Cys Tyr Leu Val Val Leu Ile Cys Ile Pro Leu Met 1 5 10 15

Ala Thr Asp Ala Glu Cys Leu Phe Leu Cys Leu Arg Ala Met Arg Ile 20 25 30

Ser Leu Glu Lys Gly Leu Ser Arg Ser Phe Ala Tyr Phe 35 40 45

<210> 1086

<211> 136

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<330>

<2221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1086
Xaa Tyr Xaa Ser Cys Arg Lys Xaa Tyr Leu Thr Tyr Gly Xaa Asn Ser
Arg Val Asp Pro Arg Val Arg His Val Cys Gly Val Arg Ala His Gly
Ala Gly Val Pro His Leu Val Ser Gly Gly Asp Glu Val Ser Pro Gly
Gly Ala Gly Pro Val Ser His Ser Ala Glu Glu Gln Pro Val His Gln
Val Asp Arg Leu Cys Gly Ala Cys Pro Gly Gln Arg Val Phe Leu Cys
Pro Gly Glu Pro Gly Ala Lys Ser Gly Arg His Leu Ser Gly Gly Val
Pro Pro Tyr Thr Glu Cys Asp His Ala Gln Pro Leu Ala Arg Pro Gly
            100
                                105
Ala Val Glu Ser Cys Asn His Glu Val Cys Ala Gln Thr Gly Glu Thr
Val Gln Pro Leu Met Ala Arg Arg
    130
<210> 1087
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<211> 45

<212> PRT

<213> Homo sapiens

<400> 1087

Met Ser Met Lys Cys Tyr Leu Val Val Leu Ile Cys Ile Pro Leu Met

Ala Thr Asp Ala Glu Cys Leu Phe Leu Cys Leu Arg Ala Met Arg Ile.

Ser Leu Glu Lys Gly Leu Ser Arg Ser Phe Ala Tyr Phe 35 , 40

<210> 1088 <211> 177

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<212> PRT
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<213> Homo sapiens

<220>

<201> SITE

<232> (90)

<213> Xaa equals any of the naturally occurring L-amino acids

<220>

<2.11> SITE

<222> (173)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1088

Leu Asp Ile Lys Val Leu Gln Val Pro Thr Arg Leu Arg Ser Pro Ala 1 5 10 15

Gly Phe Thr Gln Trp Ile Gln His Trp Gly Ser Arg Trp Ser Cys Leu 20 25 30

Pro Val Pro Arg Cys Ala Pro Ala Leu Leu Ser Pro Trp Val Val Asp 35 40 45

Gly Thr Gly Arg Cys Gly Ala Gly Gly Gly Ala Pro Trp Gly Gly Ser 50 60

Gly Arg Thr Gly Ala His Gly Gly Trp Gly Glú Gly Gln Ala Trp Arg
65 70 75 80

Ala Ala Gly Pro Glu Pro Cys Pro Ala Xaa Arg Gln Leu Arg Pro Ser 85 90 95

Glu Lys Ser Ser Thr Ala Ala Ala Gly Pro Gly Ala Lys Ala Leu Thr 100 105 110

Ala Trp Gly Arg Pro Ala Ala Leu Ser Gly Ala Pro Pro Ser Pro Arg 115 120 125

Pro Pro Gly Thr His Ser Gly Pro Gln Ala Leu Arg Ala Ala Pro Val 130 135 140

Ala Pro Ala Leu Ala Ser Pro Glu Arg Gly Ser Tyr Xaa Ala Ala Ala 165 170 175

Gly

<210> 1089

<211> 414

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (174)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (410)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1089

Met Glu Arg Ala Val Arg Val Glu Ser Gly Val Leu Val Gly Val Val

1 10 15

Cys Leu Leu Ala Cys Pro Ala Thr Ala Thr Gly Pro Glu Val Ala 20 25 30

Gln Pro Glu Val Asp Thr Thr Leu Gly Arg Val Arg Gly Arg Gln Val 35 40 45

Gly Val Lys Gly Thr Asp Arg Leu Val Asn Val Phe Leu Gly Ile Pro 50 60

Phe Ala Gln Pro Pro Leu Gly Pro Asp Arg Phe Ser Ala Pro His Pro 65 70 75 80

Ala Gln Pro Trp Glu Gly Val Arg Asp Ala Ser Thr Ala Pro Pro Met 85 90 95

Cys Leu Gl<br/>n Asp Val Glu Ser Met As<br/>n Ser Ser Arg Phe Val Leu As<br/>n 100 105 110

Gly Lys Gln Gln Ile Phe Ser Val Ser Glu Asp Cys Leu Val Leu Asn 115 120 125

Val Tyr Ser Pro Ala Glu Val Pro Ala Gly Ser Gly Arg Pro Val Met 130 135 140

Val Trp Val His Gly Gly Ala Leu Ile Thr Gly Ala Ala Thr Ser Tyr 145 150 155 160

Asp Gly Ser Ala Leu Ala Ala Tyr Gly Asp Val Val Val Xaa Thr Val 165 170 175

Gln Tyr Arg Leu Gly Val Leu Gly Phe Phe Ser Thr Gly Asp Glu His 180 185 190

Ala Pro Gly Asn Gln Gly Phe Leu Asp Val Val Ala Ala Leu Arg Trp 195 200 205

Val Gln Glu Asn Ile Ala Pro Phe Gly Gly Asp Leu Asn Cys Val Thr 210 215 220

Val Phe Gly Gly Ser Ala Gly Gly Ser Ile Ile Ser Gly Leu Val Leu 225 230 235 240

Ser Pro Val Ala Ala Gly Leu Phe His Arg Ala Ile Thr Gln Ser Gly 245 250 255

Val Ile Thr Thr Pro Gly Ile Ile Asp Ser His Pro Trp Pro Leu Ala 260 265 270

Gln Lys Ile Ala Asn Thr Leu Ala Cys Ser Ser Ser Pro Ala Glu

275 280 285

Met Val Gln Cys Leu Gln Gln Lys Glu Gly Glu Glu Leu Val Leu Ser 290 295 300

Lys Lys Leu Lys Asn Thr Ile Tyr Pro Leu Thr Val Asp Gly Thr Val 305 310 315 320

Phe Pro Lys Ser Pro Lys Glu Leu Lys Glu Lys Pro Phe His Ser 325 330 335

Val Pro Phe Leu Met Gly Val Asn Asn His Glu Phe Ser Trp Leu Ile 340 345 350

Pro Arg Gly Trp Gly Leu Leu Asp Thr Met Glu Gln Met Ser Arg Glu 355 360 365

Asp Met Leu Ala Ile Ser Thr Pro Val Leu Thr Ser Leu Asp Val Pro 370 380

Pro Glu Met Met Pro Thr Val Ile Asp Glu Tyr Leu Gly Ser Asn Ser 385 390 395 400

Asp Ala Gln Ala Lys Cys Gln Ala Phe Xaa Gly Ile His Gly 405 410 .

<210> 1090

<211> 571

<212> PRT

<213> Homo sapiens

<400> 1090

Met Glu Arg Ala Val Arg Val Glu Ser Gly Val Leu Val Gly Val Val

1 5 10 15

Cys Leu Leu Ala Cys Pro Ala Thr Ala Thr Gly Pro Glu Val Ala 20 25 30

Gln Pro Glu Val Asp Thr Thr Leu Gly Arg Val Arg Gly Arg Gln Val 40 45

Gly Val Lys Gly Thr Asp Arg Leu Val Asn Val Phe Leu Gly Ile Pro

Phe Ala Gln Pro Pro Leu Gly Pro Asp Arg Phe Ser Ala Pro His Pro 65 70 75 80

Cys Leu Gl<br/>n Asp Val Glu Ser Met As<br/>n Ser Ser Arg Phe Val Leu As<br/>n 100 105 110

Gly Lys Gln Gln Ile Phe Ser Val Ser Glu Asp Cys Leu Val Leu Asn 115 120 125

Val Tyr Ser Pro Ala Glu Val Fro Ala Gly Ser Gly Arg Pro Val Met 130 135 140

Val Trp Val His Gly Gly Ala Leu Ile Thr Gly Ala Ala Thr Ser Tyr Asp Gly Ser Ala Leu Ala Ala Tyr Gly Asp Val Val Val Thr Val 165 170 Gln Tyr Arg Leu Gly Val Leu Gly Phe Phe Ser Thr Gly Asp Glu His Ala Pro Gly Asn Gln Gly Phe Leu Asp Val Val Ala Ala Leu Arg Trp Val Gln Glu Asn Ile Ala Pro Phe Gly Gly Asp Leu Asn Cys Val Thr 215 Val Phe Gly Gly Ser Ala Gly Gly Ser Ile Ile Ser Gly Leu Val Leu Ser Pro Val Ala Ala Gly Leu Phe His Arg Ala Ile Thr Gln Ser Gly Val Ile Thr Thr Pro Gly Ile Ile Asp Ser His Pro Trp Pro Leu Ala 265 Gln Lys Ile Ala Asn Thr Leu Ala Cys Ser Ser Ser Pro Ala Glu Met Val Gln Cys Leu Gln Gln Lys Glu Gly Glu Glu Leu Val Leu Ser Lys Lys Leu Lys Asn Thr Ile Tyr Pro Leu Thr Val Asp Gly Thr Val 310 Phe Pro Lys Ser Pro Lys Glu Leu Leu Lys Glu Lys Pro Phe His Ser 330 Val Pro Phe Leu Met Gly Val Asn Asn His Glu Phe Ser Trp Leu Ile Pro Arg Gly Trp Gly Leu Leu Asp Thr Met Glu Gln Met Ser Arg Glu 360 Asp Met Leu Ala Ile Ser Thr Pro Val Leu Thr Ser Leu Asp Val Pro 375 Pro Glu Met Met Pro Thr Val Ile Asp Glu Tyr Leu Gly Ser Asn Ser 390 395 Asp Ala Gln Ala Lys Cys Gln Ala Phe Gln Glu Phe Met Gly Asp Val Phe Ile Asn Val Pro Thr Val Ser Phe Ser Arg Tyr Leu Arg Asp Ser 425 Gly Ser Pro Val Phe Phe Tyr Glu Phe Gln His Arg Pro Ser Ser Phe 435 Ala Lys Ile Lys Pro Ala Trp Val Lys Ala Asp His Gly Ala Glu Gly 455 460

Ala Phe Val Phe Gly Gly Pro Phe Leu Met Asp Glu Ser Ser Arg Leu 465 470 475 480

Ala Phe Pro Glu Ala Thr Glu Glu Lys Gln Leu Ser Leu Thr Met 485 490 495

Met Ala Gln Trp Thr His Phe Ala Arg Thr Gly Asp Pro Asn Ser Lys 500 505 510

Ala Leu Pro Pro Trp Pro Gln Phe Asn Gln Ala Glu Gln Tyr Leu Glu 515 520 525

Ile Asn Pro Val Pro Arg Ala Gly Gln Lys Phe Arg Glu Ala Trp Met 530 535 540

Gln Phe Trp Ser Glu Thr Leu Pro Ser Lys Ile Gln Gln Trp His Gln 545 550 555 560

Lys Gln Lys Asn Arg Lys Ala Gln Glu Asp Leu 565 570

<210> 1091

<211> 68

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1091

Met Ile Ser Ser Leu Leu Ser Lys Ala Val Leu Ser Leu Trp Ile Ser 1 5 10 15

Val Phe Ser Trp Asn Val Leu Gly Cys Lys Lys Leu Lys Thr Ile Ile 20 25 30

Leu Gln Cys Phe Lys Glu Ala Ser Asp Leu Val Leu Arg Glu Arg Tyr 40 45

Leu Gly Val Val Gln Ala Leu Ser Asp Asp Phe Ser Phe Cys Phe Thr 50 55 60

Ile Leu Ser Xaa 65

<210> 1092

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1092

Val Ser Lys Leu Phe Asp Leu Val Arg Val Ala Leu Trp Glu Ser Thr 1 5 10 15

Phe Leu Ser Leu Ser Leu Ser Val Pro Ser Val Cys Ala Met Phe Arg 20 25 30

Phe Leu Leu Phe Asn Val Met Glu 50 55

<210> 1093

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1093

Met Ile Ser Ser Leu Leu Ser Lys Ala Val Leu Ser Leu Trp Ile Ser 1 5 10 15

Val Phe Ser Trp Asn Val Leu Gly Cys Lys Lys Leu Lys Thr Ile Ile  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Leu Gln Cys Phe Lys Glu Ala Ser Asp Leu Phe Leu Arg Glu Arg Tyr 35 40 45

Leu Gly Val Val Gln Ser Leu Ser Asp Asp Phe Phe Leu Leu His
50 55 60

His Pro 65

<210> 1094

<211> 21

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1094

Arg Trp Arg Gly Ala Ser Thr Pro His Arg Asp Tyr Leu Ser Xaa Arg
1 5 10 15

Tyr Cys Ala Cys Gly 20

<210> 1095

<211> 11

<212> PRT

<213> Homo sapiens

<400> 1095

Trp Gln Ile Leu Leu Ile Ala Leu Leu Leu Ile 1 5 10

<210> 1096

<211> 38

<212> PRT

<213> Homo sapiens

<400> 1096

Met Leu Arg Trp Arg Leu Leu Ala Thr Ala Leu Ile Ala Leu Cys Arg 1 5 10 15

Arg Ser Ala Ser Ser Val Ala Ser Gly Glu Pro Pro Asp Ser Pro Pro 20 25 30

Cys Pro Trp Arg Arg Arg 35

<210> 1097

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (62)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1097

Met Leu His Met Tyr Ser Gln Lys Asp Pro Leu Ile Leu Cys Val Arg 1 5 10 15

Leu Ala Val Leu Leu Ala Val Thr Leu Thr Val Pro Val Val Leu Phe 20 25 30

Pro Ile Arg Arg Ala Leu Gln Gln Leu Leu Phe Pro Gly Lys Ala Phe

Ser Trp Pro Arg His Val Ala Ile Ala Leu Ile Leu Leu Xaa Leu Val 50 55 60

Asn Val Leu Ala Ser Xaa Xaa Gln Pro Xaa Gly Ile 65 70 75

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<210> 1098
<211> 54
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1098
Met Leu His Met Tyr Ser Gln Lys Asp Pro Leu Ile Leu Cys Val Pro
Pro Gly Arg Ala Ala Arg Gly Asp Pro Xaa Xaa Ala Ser Arg Ala Gly
Pro Tyr Pro Xaa Gly Pro Ala Xaa Ala Ala Phe Xaa Arg Gln Xaa Leu
                                                  45
Xaa Leu Gly Thr Thr Trp
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50

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<210> 1099
<211> 148
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1099
Leu Xaa Met Tyr Ser Gln Lys Asp Pro Leu Ile Leu Cys Val Arg Leu
                                    10
Xaa Val Leu Ala Val Thr Leu Thr Val Pro Val Val Leu Phe Pro
Ile Arg Arg Ala Leu Gln Gln Leu Leu Phe Pro Gly Lys Ala Phe Ser
Trp Pro Arg His Val Ala Ile Ala Leu Ile Leu Leu Val Leu Val Asn
Val Leu Val Ile Cys Val Pro Thr Ile Arg Asp Ile Phe Gly Val Ile
Gly Ser Thr Ser Ala Pro Ser Leu Ile Phe Ile Leu Pro Ser Ile Phe
Tyr Leu Arg Ile Val Pro Ser Glu Val Glu Pro Phe Leu Ser Trp Pro
Lys Ile Gln Ala Leu Cys Phe Gly Val Leu Gly Val Leu Phe Met Ala
                         . 120
        115
Val Ser Leu Gly Phe Met Phe Ala Asn Trp Ala Thr Gly Gln Ser Arg
                       135
                                           140
Met Ser Gly His
145
<210> 1100
<211> 149
<212> PRT
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<212> PRT
<213> Homo sapiens

<400> 1100

Met Leu His Met Tyr Ser Gln Lys Asp Pro Leu Ile Leu Cys Val Arg
1 5 10 15

Leu Ala Val Leu Leu Ala Val Thr Leu Thr Val Pro Val Val Leu Phe
20 25 30

Pro Ile Arg Arg Ala Leu Gln Gln Leu Leu Phe Pro Gly Lys Ala Phe 35 40 45

Ser Trp Pro Arg His Val Ala Ile Ala Leu Ile Leu Leu Val Leu Val 50 55 60

Asn Val Leu Val Ile Cys Val Pro Thr Ile Arg Asp Ile Phe Gly Val 65 70 75 80

Ile Gly Ser Thr Ser Ala Pro Ser Leu Ile Phe Ile Leu Pro Ser Ile 85 90 95

Phe Tyr Leu Arg Ile Val Pro Ser Glu Val Glu Pro Phe Leu Ser Trp 100 105 110

Pro Lys Ile Gln Ala Leu Cys Phe Gly Val Leu Gly Val Leu Phe Met 115 120 125

Ala Val Ser Leu Gly Phe Met Phe Ala Asn Trp Ala Thr Gly Gln Ser 130 140

Arg Met Ser Gly His 145

<210> 1101

<211> 40

<212> PRT

<213> Homo sapiens

<400> 1101

Met Ile Leu Arg Gly Val Tyr Ser Met Val Pro Ile Tyr Thr His Met  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ile Phe Leu Phe Thr Phe Phe Leu Thr Ile Ser Gly Lys Tyr Phe Lys 20 25 30

Ile Phe Glu Lys His Ser Arg Ile 35 40

<210> 1102

<211> 40

<212> PRT

<213> Homo sapiens

<400> 1102

Met Ile Leu Arg Gly Val Tyr Ser Met Val Pro Ile Tyr Thr His Met 1 5 10 15

Ile Phe Leu Phe Thr Phe Phe Leu Thr Ile Ser Gly Lys Tyr Phe Lys 20 25 30

Ile Phe Glu Lys His Ser Arg Ile 35 40

<210> 1103

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1103

Met Asn Leu Trp Leu Gly Ala Leu Ile Pro Val Thr Val His Leu Lys
1 5 10 15

Arg Met Trp Ser His Pro Lys Phe Gln Ala Gln Lys Thr Phe Pro Leu 20 25 30

Ser Lys Ser Pro Lys Tyr His Pro Val Phe Leu Leu Val Ile Ile Met 35 40 45

Ala Arg Ser Ser Gln Leu Lys Arg
50 55

<210> 1104

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1104

Gln Gly Phe Ile Phe Trp Thr Gln Tyr Asn Ile Gly Tyr Ile Ser Leu 1 5 10

Arg Ser Ile Gly Phe Gln His Lys Ser Leu Pro Ile Arg Lys Ser Lys 20 25 30

Trp Arg Lys His Gln Ile Ile Ile Ile Ile Thr Gln Gln Lys Cys Gly 35 40 45

Asp Trp Gln Trp Phe Trp Gly Phe Ile Ser Ser Ile Arg Ala Ser Ala 50 55 60

Ser His Phe Met Lys Leu Leu Pro Ser Glu Arg Thr Leu Asn Thr Pro 65 70 75 80

Arg Ser Tyr Cys Ser Phe Phe Leu Asn Gly Ile Leu Lys Asn Trp Leu 85 90 95

Lys Arg Glu Glu His Ser Lys Tyr Ile Leu 100 105

<210> 1105

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1105

Met Asn Leu Trp Leu Gly Ala Leu Ile Pro Val Thr Val His Leu Lys 1 5 10 15

Arg Met Trp Ser His Pro Lys Phe Gln Ala Gln Lys Thr Phe Pro Leu 20 25 30

Ser Lys Ser Pro Lys Tyr His Pro Val Phe Leu Leu Val Ile Ile Met 35 40 45

Ala Arg Ser Ser Gln Leu Lys Arg
50 55

<210> 1106

<211> 116

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1106

Val Gly Phe Gln Gly Leu Glu Gly Asn Pro Pro Pro Ala Xaa Leu Asn
1 5 10 15

Gly Leu Glu Gly Lys Gly Lys Leu Xaa Lys Lys Ala Gln Gly Thr Gly 20 25 30

Xaa Lys Ile Ile Phe Trp Pro Lys Glu Ser Lys Thr Pro Ser Gly Ser 35 40 45

Pro Lys Pro Ala Lys Ala Ala Asn Ser Lys Ser Lys Glu Ser Asp Glu 50 55 60

Pro His His Ser Lys Asn Glu Arg Pro Ala Arg Pro Pro Pro Pro Ile
65 70 75 80

Met Thr Asp Gly Glu Asp Ala Asp Tyr Thr His Phe Thr Asn Gln Gln 85 90 95

Ser Ser Thr Arg His Phe Ser Lys Ser Glu Ser Ser His Lys Gly Phe
100 105 110

His Tyr Lys His 115

<210> 1107

<211> 4

<212> PRT

<213> Homo sapiens

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<400> 1107
Val Leu Arg Asn
1
<210> 1108
<211> 4
<212> PRT
<213> Homo sapiens
<400> 1108
Val Leu Arg Asn
<210> 1109
<211> 54
<212> PRT
<213> Homo sapiens
<400> 1109
Met Ser Ser Leu Gly Leu Gln Glu Pro Gln Lys Asn Leu Thr Ser Phe
Pro Gln Ile Ser Pro Tyr Pro Leu Ser Ile Phe Thr Pro Ile Ile Ile
Tyr Phe His Thr Ile Gln Leu Ser Lys Asp Ser Trp Arg Leu Thr Cys
        35
                             40
                                                 45
Ile Phe Arg Leu Thr Glu
    50
<210> 1110
<211> 5
<212> PRT
<213> Homo sapiens
<400> 1110
Thr Thr Met Thr Gly
1
<210> 1111
<211> 40
<212> PRT
<213> Homo sapiens
Met Pro Thr Thr Val Gly Ala Gln Ile Phe Ile Phe Ile Phe Leu Leu
                                    10
Cys Thr Leu Phe Phe Leu Pro Phe Tyr Gly Cys Leu Lys Ser Arg Glu
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25

20

Lys Gly Arg Leu Val Asn Asp Glu 35, 40

<210> 1112

<211> 40

<212> PRT

<213> Homo sapiens

<400> 1112

Met Pro Thr Thr Val Gly Ala Gln Ile Phe Ile Phe Ile Phe Leu Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Cys Thr Leu Phe Phe Leu Pro Phe Tyr Gly Cys Leu Lys Ser Arg Glu 20 25 30

Lys Gly Arg Leu Val Asn Asp Glu 35 40

<210> 1113

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1113

Val Asp Pro Arg Val Arg Thr Ser Ser Arg Ser Arg Ala Ala Ala Leu 1 5 10 15

Phe Glu Cys Phe Leu Met Val Phe Leu Leu Lys Cys Gln Val Asn Asn 20 25 30

Phe Asn Pro Ile Gln Gln Tyr Ser Leu Phe Pro Leu Lys Ser Ser Gly 35 40 45

Thr Cys Ser Ile Ser Leu Phe Cys Met Arg Gly Leu Tyr Phe Cys Leu 50 55 60

Gly Val Val Ile Cys Thr His Ala Ile Leu Leu Lys Pro Ser Cys Leu 65 70 75 7 80

Val Leu Phe Leu Glu Ser Phe Phe Phe Pro Val Leu Met Tyr Ala Gly
85 90 95

Phe Gly Asn Ser Ser 100

<210> 1114

<211> 216

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1114

Met Lys Glu Arg Lys Gly Phe Asn Leu Gln Gly Pro Leu Ile Leu Trp
1 5 10 15

Ser Phe Cys Leu Ala Ile Phe Ser Ile Leu Gly Ala Val Arg Met Trp \$20\$ \$25\$ \$30

Gly Ile Met Gly Thr Val Leu Leu Thr Gly Gly Leu Lys Gln Thr Val 35 40 45

Val Phe Leu Leu Ser Lys Val Ile Glu Leu Gly Asp Thr Ala Phe Ile 65 70 75 80

Ile Leu Arg Lys Arg Xaa Leu Ile Phe Ile His Trp Tyr His His Ser 85 90 95

Thr Val Leu Val Tyr Thr Ser Phe Gly Tyr Lys Asn Lys Val Pro Ala 100 105 110

Gly Gly Trp Phe Val Thr Met Asn Phe Gly Val His Ala Ile Met Tyr 115 120 125

Thr Tyr Tyr Thr Leu Lys Ala Ala Asn Val Lys Pro Pro Lys Met Leu 130 135 140

Pro Met Leu Ile Thr Ser Leu Gln Ile Leu Gln Met Phe Val Gly Ala 145 150 155 160

Ile Val Ser Ile Leu Thr Tyr Ile Trp Arg Gln Asp Gln Gly Cys His
165 170 175

Thr Thr Met Glu His Leu Phe Trp Ser Phe Ile Leu Tyr Met Thr Tyr 180 185 190

Phe Ile Leu Phe Ala His Phe Phe Cys Gln Thr Tyr Ile Arg Pro Lys 195 200 205

Val Lys Ala Lys Thr Lys Ser Gln 210 215

<210> 1115

<211> 216

<212> PRT

<213> Homo sapiens

<400> 1115

Met Lys Glu Arg Lys Gly Phe Asn Leu Gln Gly Pro Leu Ile Leu Trp 1 5 10

Ser Phe Cys Leu Ala Ile Phe Ser Ile Leu Gly Ala Val Arg Met Trp 20 25 30

Gly Ile Met Gly Thr Val Leu Leu Thr Gly Gly Leu Lys Gln Thr Val

35 40 45

Cys Phe Ile Asn Phe Ile Asp Asn Ser Thr Val Lys Phe Trp Ser Trp 50 55 60

Val Phe Leu Leu Ser Lys Val Ile Glu Leu Gly Asp Thr Ala Phe Ile 65 70 75 80

Ile Leu Arg Lys Arg Pro Leu Ile Phe Ile His Trp Tyr His His Ser 85 90 95

Thr Val Leu Val Tyr Thr Ser Phe Gly Tyr Lys Asn Lys Val Pro Ala 100 105 110

Gly Gly Trp Phe Val Thr Met Asn Phe Gly Val His Ala Ile Met Tyr 115 120 125

Thr Tyr Tyr Thr Leu Lys Ala Ala Asn Val Lys Pro Pro Lys Met Leu 130 135 140

Pro Met Leu Ile Thr Ser Leu Gln Ile Leu Gln Met Phe Val Gly Ala 145 150 155 160

Ile Val Ser Ile Leu Thr Tyr Ile Trp Arg Gln Asp Gln Gly Cys His
165 170 175

Thr Thr Met Glu His Leu Phe Trp Ser Phe Ile Leu Tyr Met Thr Tyr 180 185 190

Phe Ile Leu Phe Ala His Phe Phe Cys Gln Thr Tyr Ile Arg Pro Lys 195 200 205

Val Lys Ala Lys Thr Lys Ser Gln 210 215

<210> 1116

<211> 16

<212> PRT

<213> Homo sapiens

<400> 1116

Val Leu Gly Leu Gly Val Val Leu Thr Pro Ile Ile Pro Val Leu Trp

1 10 15

<210> 1117

<211> 55

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 1117
Asn Asn Leu Cys Phe Ile Ser Pro Phe Thr Ser Met Tyr Trp Leu Ala
                                    10
Gln Phe Ile Val Ser Glu Lys Gln Gly Thr His Leu His Xaa Leu Gln
                               25
Glu Thr Val Leu Pro Phe Asn Leu Lys Thr Arg Lys Leu Asn Phe Asn
                           40
Arg Asn Leu Leu Ser Met Leu
    50
<210> 1118
<211> 32
<212> PRT
<213> Homo sapiens
<400> 1118
Met His Met Trp Ile Leu Ser Leu His Phe Ile Phe Thr Pro Arg Leu
Val Leu Cys Glu Val Arg Pro Asn Lys Ile Val Glu Asp Thr Ile Ile
                                 25
<210> 1119
<211> 1
<212> PRT
<213> Homo sapiens
<400> 1119
Ala
 1
<210> 1120
<211> 51
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<322> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1120

Met Glu Leu Leu Gln Ala Lys Lys Leu Leu Leu Leu Leu Gly Leu Phe
1 5 10 15

Val Ser Cys Xaa Ser Asn Ile Arg Lys Thr Glu Pro Cys Phe Gly Leu 20 25 30

Asp Ser Ile Thr Phe Xaa Asp Pro Lys Lys Lys Cys Leu Ser Asn Leu 35 . 40 45

Lys Ser Cys

<210> 1121

<211> 51

<212> PRT

<213> Homo sapiens

<400> 1121

Met Glu Leu Leu Gl<br/>n Ala Lys Lys Leu Leu Leu Leu Leu Gly Leu Phe 1 5 10 15

Val Ser Cys Cys Ser Asn Ile Arg Lys Thr Glu Pro Cys Phe Gly Leu 20 25 30

Asp Ser Ile Thr Phe Arg Asp Pro Lys Lys Lys Cys Leu Cys Asn Leu 35 40 45

Lys Ser Cys 50

<210> 1122

<211> 2

<212> PRT

<213> Homo sapiens

<400> 1122

Tyr Phe

<210> 1123

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1123

Leu Thr Thr Pro Tyr Gly Gly Leu Cys Lys Gln Ser Thr Arg Gly Ser 1 5 10 15

Ile Ile Ser Thr Trp Gln Cys Thr Trp Trp Leu Cys Asp Leu Glu Lys 20 25 30

Val Ser Tyr Ser Cys Leu Cys Val Leu Thr Leu Glu Thr Glu Thr Leu 35 40 45

Fhe Val Val Phe Thr Leu Phe Gln Gln Gln Lys Leu Phe Gln Gly Lys
50 60

Ser Tyr Arg Thr Phe Lys His Val Cys Ile His Thr Tyr Pro Ile Pro 65 70 75 80

His Tyr Ile Lys Val Ile Leu Leu 85

<210> 1124

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1124

Met Asn Leu Gly Trp Tyr Gln Met His Pro Leu Lys Met Ile Trp Leu 1 5 10 15

Thr Ile Phe Leu Thr Trp Leu Met Arg Gln Ala Ser Pro Thr Gly His 20 25 30

Asp Leu Glu Val Lys Val Phe Cys Cys Tyr Cys Gly Leu Lys Tyr Leu 35 40 45

Val Met Gly Glu Glu Cys Arg Val Val Ala Leu Ala Gln Thr Gln Glu 50 55 60

Asn Pro Phe Ser Pro Leu Phe Tyr Phe Cys Tyr Ser Asp His Leu Ser 65 70 75 80

Pro Phe

<210> 1125

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1125

Met Asn Leu Gly Trp Tyr Gln Met His Pro Leu Lys Met Ile Trp Leu  $1 \hspace{1cm} 1 \hspace{1cm} 15$ 

Thr Ile Phe Leu Thr Trp Leu Met Arg Gln Ala Ser Pro Thr Gly His  $20 \\ 25 \\ 30$ 

Asp Leu Glu Val Lys Val Phe Cys Cys Tyr Cys Gly Leu Lys Tyr Leu 35 40 45

Val Met Gly Glu Glu Cys Arg Val Val Ala Leu Ala Gln Thr Gln Glu
50 60

Asn Pro Phe Ser Pro Leu Phe Tyr Phe Cys Tyr Ser Asp His Leu Ser 65 70 75 80

Pro Phe

```
<210> 1126
<211> 84
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1126
Met Gly Thr Phe Ser Leu Met Leu Leu Leu Pro Ser Val Val Cys
Xaa Ser Phe Lys Val Arg Pro Leu Phe Cys Arg Ala Ala Val Val Cys
                               . 25
Ser Gly Ser Thr Ser Asp Pro Ile His Leu Gly Pro Ser His Thr Trp
                            40
Arg Cys His Gln Trp Arg Leu Gln Asn Ser Lys Asp Gly Cys Leu Leu
Leu Pro Pro Gly Ser Pro Ser Gln Arg Glu Thr Asp Leu Met Leu Ala
Gly Met Leu Leu
<210> 1127
<211> 25
<212> PRT
<213> Homo sapiens
<400> 1127
Gly Leu Phe Ala Leu Ser Phe Leu Phe Leu Val Val Met Leu Gly
               5
Cys Gln Phe Asp Ile Phe Leu Ala Phe
             20
<210> 1128
<211> 84
<212> PRT
<213> Homo sapiens
<400> 1128
Met Gly Thr Phe Ser Leu Met Leu Leu Leu Pro Ser Val Val Cys
                            10
Phe Ser Phe Lys Val Arg Pro Leu Phe Cys Arg Ala Ala Val Val Cys
```

25

Ser Gly Ser Thr Ser Asp Pro Ile His Leu Gly Pro Ser His Thr Trp 36 40 45

Arg Cys His Gln Trp Arg Leu Gln Asn Ser Lys Asp Gly Cys Leu Leu 50 55 60

Leu Pro Pro Gly Ser Pro Ser Gln Arg Glu Thr Asp Leu Met Leu Ala 65 70 75 80

Gly Met Leu Leu

<210> 1129

<211> 219

<212> PRT

<213> Homo sapiens

<400> 1129

Met Glu Met Ala Ser Lys Met Lys Asp Thr Gly Phe Ile Val Phe Ala 1 5 10 15

Val Leu Leu Val Ser Cys Leu Ile Leu Ile Phe Val Ile Ala Pro  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30 \hspace{1.5cm}$ 

Arg Tyr Gly Gln Arg Asn Ile Leu Ile Tyr Ile Ile Ile Cys Ser Val\$35\$ 40 45

Ile Gly Ala Phe Ser Val Ala Ala Val Lys Gly Leu Gly Ile Thr Ile
50 55 60

Lys Asn Phe Phe Gln Gly Leu Pro Val Val Arg His Pro Leu Pro Tyr 65 70 75 80

Ile Leu Ser Leu Ile Leu Ala Leu Ser Leu Ser Thr Gln Val Asn Phe 85 90 95

Leu Asn Arg Ala Leu Asp Ile Phe Asn Thr Ser Leu Val Phe Pro Ile 100 105 110

Tyr Tyr Val Phe Phe Thr Thr Val Val Val Thr Ser Ser Ile Ile Leu 115 120 125

Phe Lys Glu Trp Tyr Ser Met Ser Ala Val Asp Ile Ala Gly Thr Leu 130 135 140

Ser Gly Phe Val Thr Ile Ile Leu Gly Val Phe Met Leu His Ala Phe 145 150 155 160

Lys Asp Leu Asp Ile Ser Cys Ala Ser Leu Pro His Met His Lys Asn 165 170 175

Pro Pro Pro Ser Pro Ala Pro Glu Pro Thr Val Ile Arg Leu Glu Asp 180 135 190

Lys Asn Val Leu Val Asp Asn Ile Gla Leu Ala Ser Thr Ser Ser Pro 195 200 205

Glu Glu Lys Pro Lys Val Phe Ile Ile His Ser

210 215

<210> 1130

<211> 219

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (197)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1130

Met Glu Met Ala Ser Lys Met Lys Asp Thr Gly Phe Ile Val Phe Ala 1 5 10 15

Val Leu Leu Val Ser Cys Leu Ile Leu Ile Phe Val Ile Ala Pro 20 25 30

Arg Tyr Gly Gln Arg Asn Ile Leu Ile Tyr Ile Ile Ile Cys Ser Val\$35\$ 40 45

Ile Gly Ala Phe Ser Val Ala Ala Val Lys Gly Leu Gly Ile Thr Ile 50 55 60

Lys Asn Phe Phe Gln Gly Leu Pro Val Val Arg His Pro Leu Pro Tyr 65 70 75 80

Ile Leu Ser Leu Ile Leu Ala Leu Ser Leu Ser Thr Gln Val Asn Phe
85 90 95

Leu Asn Arg Ala Leu Asp Ile Xaa Asn Thr Ser Leu Val Phe Pro Ile 100 105 110

Tyr Tyr Val Phe Phe Thr Thr Val Val Val Thr Ser Ser Ile Ile Leu 115 120 125

Phe Lys Glu Trp Tyr Ser Met Ser Ala Val Asp Ile Ala Gly Thr Leu 130 135 140

Ser Gly Phe Val Thr Ile Ile Leu Gly Val Phe Met Leu His Ala Phe 145 150 155 160

Lys Asp Leu Asp Ile Ser Cys Ala Ser Leu Pro His Met His Lys Asn 165 170 175

Pro Pro Pro Ser Pro Ala Pro Glu Pro Thr Val Ile Arg Leu Glu Asp 180 185 190

Lys Asn Val Leu Xaa Asp Asn Ile Glu Leu Ala Ser Thr Ser Ser Pro
195 200 205

Glu Glu Lys Pro Lys Val Phe Ile Ile His Ser

210 215

<210> 1131

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1131

Met Ala Ser Lys Met Lys Asp Thr Gly Phe Ile Val Phe Ala Val Leu 1 5 10 15

Leu Leu Val Ser Cys Leu Ile Leu Ile Phe Val Ile Ala Pro Arg Tyr 20 25 30

Gly Gln Arg Asn Ile Leu Ile Tyr Ile Ile Ile Cys Ser Val Ile Gly 35 40 45

Ala Phe Ser Val Ala Ala Val Lys Gly Leu Gly Ile Thr Ile Lys Asn 50 55 60

Phe Phe Gln Gly Leu Pro Val Val Arg His Pro Leu Pro Tyr Ile Leu 65 70 75 80

Ser Leu Ile Leu Ala Leu Ser Leu Ser Thr Gln Val Asn Phe Leu Asn 85 90 95

Arg Ala Leu Asp Ile Phe Asn Thr Ser Leu Val Phe Pro Ile Tyr Tyr 100 105 110

Val Phe Phe Thr Thr Val Val Val Thr Ser Ser Ile Ile Leu Phe Lys 115 120 125

Glu Trp Tyr Ser Met Ser Ala Val Asp Ile Ala Gly Thr Leu Ser Gly 130 135 140

Leu Asp Ile Ser Cys Ala Ser Leu Pro His Met His Lys Asn Pro Pro
165 170 175

Pro Ser Pro Ala Pro Glu Pro Thr Val Ile Arg Leu Glu Asp Lys Asn 180 185 190

Val Leu Val Asp Asn Ile Glu Leu Ala Ser Thr Ser Ser Pro Glu Glu 195 200 205

Lys Pro Lys Val Phe Ile Ile His Ser 210 215

<210> 1132

<211> 253

<212> PRT

<213> Homo sapiens

<220>

- <221> SITE
- <222> (215)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (252)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (253)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 1132
- Met Gln Ala Cys Val Leu Leu Leu Gly Leu Val Leu Ser Ala Gln Leu 1 5 10 15
- Gln Ser Pro Glu Asn Met Arg Met Gly Gly Gly Arg Val Leu Leu Arg
  20 25 30
- Ala His Pro Val Pro Ala Gly Gly Gly Gln Cys Gln Ser Ser Ala Lys 35 40 45
- Gly Pro Trp Val Gly Thr Gly Pro Glu Arg Glu Glu Arg Asp Ser Pro 50 55 60
- Glu Gly Arg Trp Ala Ser Tyr Trp Ala Gln Ser Trp Glu Gly Val Ala 65 70 75 80
- Ala Ser Thr Gly Trp Ala Trp Thr Pro Leu Ala Pro Thr Pro Ser Gly 85 90 95
- Cys Gly Cys Ser Leu Ser Leu Glu Ser Arg Thr Gly Pro Gly Cys Leu
  100 105 110
- Gly Gly Cys Gln Val Pro Pro Glu Leu Pro Arg Ala Pro Thr Cys Lys 115 120 125
- Cys Gln Pro Gln Gly Ser Ala Gln Met Arg Pro Ser Gln Leu Gln Pro 130 140
- Ala Met Pro Trp Asp Ala His Arg Glu Gly Gly Phe Gly Leu Leu 145 150 155 160
- Ser Pro Trp Glu Arg Leu Gly Ala Val Thr Ala Arg Leu Ala Gln Ala 165 170 175
- His Cys Arg Val Gly Trp Leu Pro Gln Pro Gly Leu Gly Gly Thr Pro 180 185 190
- Gly Ser Gly Pro Pro Cys Leu Glu Ser Gln Trp Gly Asp Gly Glu Glu 195 200 205
- Thr Trp Pro Pro Met Ala Xaa Gly Gln Leu Arg Thr Arg Thr Cys Trp 210 215 220
- Ser Trp Lys Cys Cys Gly Val Glu Gly Trp Gly Gly Gln Leu Leu Thr 225 230 235 240

Pro Ala Ser Cys Leu Leu Leu Ser Thr Phe Pro Xaa Xaa 245 250

<210> 1133

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1133

Asn Ser Glu Lys Gly Gln Lys Lys Gln Arg Gly Pro Arg Trp Ile Cys
1 10 15

Gln Leu Phe Cys Arg Cys Phe Leu Pro Leu Leu Trp Val Val Cys Ser 20 25 30

Pro Leu Gl<br/>n Thr Ser Ala Arg Arg Glu Gly Leu As<br/>n Leu Pro Ala Pro \$45\$

Gln Asp Leu Leu Pro Ser Gly Pro Ser Pro Ala Leu Arg Ser Leu Pro 50 55 60

Asp Arg Arg Val Asp Arg Ala Thr Trp Ala Ala Arg Glu Thr His Gly 65 70 75 80

Gly Pro Pro Cys Gly Gln Pro Cys Gln Leu Pro Pro Ser Pro Glu Leu 85 90 95

His Leu His Leu Glu Glu 100

<210> 1134

<211> 137

<212> PRT

<213> Homo sapiens

<400> 1134

Met Gln Ala Cys Val Leu Leu Gly Leu Val Leu Ser Ala Gln Leu
1 5 10 15

Gln Ser Pro Glu Asn Met Arg Met Gly Gly Gly Arg Val Leu Leu Arg 20 25 30

Ala His Pro Val Pro Ala Gly Gly Gly Gln Cys Gln Ser Ser Ala Lys
35 40 45

Gly Pro Trp Val Gly Thr Gly Pro Glu Arg Glu Glu Arg Asp Ser Pro 50 55 60

Glu Gly Arg Trp Ala Ser Tyr Trp Ala Gln Ser Trp Glu Gly Val Ala 65 70 75 80

Ala Ser Thr Gly Trp Ala Trp Thr Pro Leu Ala Pro Thr Pro Ser Gly 85 90 95

Cys Gly Cys Ser Pro Lys Pro Gly Glu Gln Asp Arg Fro Gly Val Ser 100 105 110

Gly Arg Leu Pro Gly Ala Ser Gln Ser Ser Gln Gly Pro Pro Pro Ala 115 120 125

Ser Ala Ser Leu Arg Ala Val Pro Lys 130 135

<210> 1135

<211> 93

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1135

Met Tyr Ala Leu Tyr Ile Thr Val His Gly Tyr Phe Leu Ile Thr Phe  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Phe Gly Met Val Val Leu Ala Leu Val Val Trp Lys Ile Phe Through 20 25 30

Leu Xaa Arg Ala Thr Ala Val Lys Glu Arg Gly Lys Asn Arg Lys Lys 35 40 45

Val Leu Thr Leu Leu Gly Leu Ser Ser Leu Val Gly Val Thr Trp Gly 50 55 60

Leu Ala Ile Phe Thr Pro Leu Gly Leu Ser Thr Xaa Tyr Ile Phe Ala 65 70 75 80

<210> 1136

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1136

Met Tyr Ala Leu Tyr Ile Thr Val His Gly Tyr Phe Leu Ile Thr Phe 1 5 10 15

Leu Phe Gly Met Val Val Leu Ala Leu Val Val Trp Lys Ile Phe Thr 20 25 30

Leu Ser Arg Ala Thr Ala Val Lys Glu Arg Gly Lys Asn Arg Lys Lys 35 40 45

Val Leu Thr Leu Gly Leu Ser Ser Leu Val Gly Val Thr Trp Gly 50 55 60

Leu Ala Ile Phe Thr Pro Leu Gly Leu Ser Thr Val Tyr Ile Phe Ala 65 70 75 80

Leu Phe Asn Ser Leu Gln Ala Gln Arg Gly Ile Thr Val 85 90

<210> 1137

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1137

Met Tyr Ala Leu Tyr Ile Thr Val His Gly Tyr Phe Leu Ile Thr Phe  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Phe Gly Met Val Val Leu Ala Leu Val Val Trp Lys Ile Phe Thr 20 25 30

Leu Ser Arg Ala Thr Ala Val Lys Glu Arg Gly Lys Asn Arg Lys Lys 35 40 45

Val Leu Thr Leu Gly Leu Ser Ser Leu Val Gly Val Thr Trp Gly 50 55 60

Leu Ala Ile Phe Thr Pro Leu Gly Leu Ser Thr Val Tyr Ile Phe Ala 65 70 75 80

Leu Phe Asn Ser Leu Gln Gly Val Phe Ile Cys Cys Trp Phe Thr Ile 85 90 95

Leu Tyr Leu Pro Ser Gln Ser Thr Thr Val Ser Ser Ser Thr Ala Arg 100 105 110

Leu Asp Gln Ala His Ser Ala Ser Gln Glu 115 120

<210> 1138

<211> 241

<212> PRT

<213> Homo sapiens

<400> 1138

Ala Pro Gly Gln Thr Pro Ser Leu Cys Ser Trp Leu Leu Pro Leu Pro 1 5 10 15

Ser Thr Trp Ala Thr Thr Gly His Val Cys Phe Ser Asp Ile Leu Gln 20 25 30

Thr Pro Asp Gly Gly Gln Leu Leu Asp Trp Ala Lys Gln Pro Asp 35 40 45

Ser Ser Gln Asp Pro Asp Pro Thr Thr Gln Pro Ile Val Leu Leu 50 55 60

Asn Gln Ala Leu Arg Asp Gly Tyr Gln Ala Val Val Phe Asn Asn Arg 95
Gly Cys Arg Gly Glu Glu Leu Arg Thr His Arg Ala Phe Cys Ala Ser 100
Asn Thr Glu Asp Leu Glu Thr Val Val Asn His Ile Lys His Arg Tyr 115
Pro Gln Ala Pro Leu Leu Ala Val Gly Ile Ser Phe Gly Gly Ile Leu 130
Val Leu Asn His Leu Ala Gln Ala Arg Gln Ala Ala Gly Leu Val Ala 145
Ala Leu Thr Leu Ser Ala Cys Trp Asp Ser Phe Glu Thr Thr Arg Ser 175

Pro Gly Ile Thr Gly Ser Ser Gln Glu Thr Tyr Val Leu His Leu Val

Leu Glu Thr Pro Leu Asn Ser Leu Leu Phe Asn Gln Pro Leu Thr Ala 180 185 190

Gly Leu Cys Gln Leu Val Glu Arg Leu Ser Tyr Gly Lys Thr Cys Arg 195 200 205

Pro Val Gln Ser Ala Ser Leu Met Ser Ala Thr His Leu Trp Pro Leu 210 215 220

Asp Ile Lys Thr Val Leu Pro Thr Thr Lys Gln Gln Ala Leu Glu Pro 225 230 235 240

Arg

<210> 1139 <211> 242 <212> PRT

<213> Homo sapiens

<400> 1139

Met Ala Pro Gly Gln Thr Pro Ser Leu Cys Ser Trp Leu Leu Pro Leu 1 5 15

Pro Ser Thr Trp Ala Thr Thr Gly His Val Cys Phe Ser Asp Ile Leu
20 25 30

Gln Thr Pro Asp Gly Gln Leu Leu Leu Asp Trp Ala Lys Gln Pro 35 40 45

Asp Ser Ser Gln Asp Pro Asp Pro Thr Thr Gln Pro Ile Val Leu Leu 50 55 60

Leu Pro Gly Ile Thr Gly Ser Ser Gln Glu Thr Tyr Val Leu His Leu 65 70 75 80

Val Asn Gln Ala Leu Arg Asp Gly Tyr Gln Ala Val Val Phe Asn Asn 85 90 95

Arg Gly Cys Arg Gly Glu Glu Leu Arg Thr His Arg Ala Phe Cys Ala 100 105 110

Ser Asn Thr Glu Asp Leu Glu Thr Val Val Asn His Ile Lys His Arg 115 120 125

Tyr Pro Gln Ala Pro Leu Leu Ala Val Gly Ile Ser Phe Gly Gly Ile 130 135 140

Leu Val Leu Asn His Leu Ala Gln Ala Arg Gln Ala Ala Gly Leu Val 145 150 155 160

Ala Ala Leu Thr Leu Ser Ala Cys Trp Asp Ser Phe Glu Thr Thr Arg 165 170 175

Ser Leu Glu Thr Pro Leu Asn Ser Leu Leu Phe Asn Gln Pro Leu Thr 180 185 ' 190

Ala Gly Leu Cys Gln Leu Val Glu Arg Leu Ser Tyr Gly Lys Thr Cys 195 200 205

Arg Pro Val Gln Ser Ala Ser Leu Met Ser Ala Thr His Leu Trp Pro 210 215 220

Leu Asp Ile Lys Thr Val Leu Pro Thr Thr Lys Gln Gln Ala Leu Glu 225 230 240

Pro Arg

<210> 1140

<211> 180

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (143)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1140

Met Gly Trp Pro Arg Pro Gly Arg Ala Leu Val Ala Val Lys Ala Leu 1 5 10 15

Leu Val Leu Ser Leu Leu Gln Val Pro Ala Gln Ala Val Val Arg Ala
20 25 30

Val Leu Glu Asp Asn Ser Ser Ser Val Asp Phe Ala Asp Leu Pro Ala 35 40 45

Leu Phe Gly Val Pro Leu Ala Pro Glu Gly Ile Arg Gly Tyr Leu Met 50 60

Glu Val Lys Pro Ala Asn Ala Cys His Pro Ile Glu Ala Pro Arg Leu 65 70 75 80

Gly Asn Arg Ser Leu Gly Ala Ile Val Leu Ile Arg Arg Tyr Asp Cys
85 90 95

Thr Phe Asp Leu Lys Val Leu Asn Ala Gln Arg Ala Gly Phe Glu Ala 100 105 110

Ala Ile Val His Asn Val His Ser Asp Asp Leu Val Ser Met Thr His 115 120 125

Val Tyr Glu Asp Leu Arg Gly Gln Ile Ala Ile Pro Ser Val Xaa Val 130 135 140

Ser Glu Ala Ala Arg Arg Thr Cys Gly Ser Ser Trp Ala Ala Thr Ser 145 150 . 155 160

Arg Pro Thr Arg Cys Pro Ala Asp Asp Pro Pro Cys His Asp Leu Ala 165 170 175

Val Thr Pro Cys 180

<210> 1141

<211> 225

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1141

Thr Gln Pro Cys Gln Arg Pro Gly Ile Val Thr Pro Val Leu Thr Val

1 5 10 15

Ser Trp Val Leu Xaa Cys Thr Leu Ala Leu Val Val Ser Ala Phe Phe 20 25 30

Val Leu Asn His Leu Trp Leu Trp Ala Gln Ala Cys Xaa Ser His Arg 35 40 45

Arg Pro Val Lys Thr Ser Thr Cys Gln Lys Ala Gln Val Arg Thr Phe 50 55 60

Thr Trp His Asn Asp Leu Cys Ala Ile Cys Leu Asp Glu Tyr Glu Glu 65 70 75 80

Gly Asp Gln Leu Lys Ile Leu Pro Cys Ser His Thr Tyr His Cys Lys 85 90 95

Cys Ile Asp Pro Trp Phe Ser Gln Ala Pro Arg Arg Ser Cys Pro Val

Cys Lys Gln Ser Val Ala Ala Thr Glu Asp Ser Phe Asp Ser Thr Thr 115 120 125

Tyr Ser Phe Arg Asp Glu Asp Pro Ser Leu Pro Gly His Arg Pro Pro 130 135 140

Ile Trp Ala Ile Gln Val Gln Tyr Ala Pro Gly Gly Trp Ser Cys Trp 145 150 155 160

Ala Ala Pro Val Pro Thr Ala Thr Ala Ala Pro Arg Pro Trp Arg Gln \$165\$ \$170\$ \$175\$

Ser Ile Pro Leu Ser Pro Gln Pro Leu Leu Arg Pro Leu Val Ser Lys 180 185 190

Asp Leu Gly Gln Gly Gly Gly Cys Asn Glu Glu Cys Phe Trp Ser Glu
195 200 205

Lys Asn Lys Val Gly Leu Lys Ala Glu Lys Lys Lys Lys Lys Lys Thr 210 215 220

Arg 225

<210> 1142

<211> 359

<212> PRT

<213> Homo sapiens

<400> 1142

Met Gly Trp Pro Arg Pro Gly Arg Ala Leu Val Ala Val Lys Ala Leu 1 5 10 15

Leu Val Leu Ser Leu Leu Gln Val Pro Ala Gln Ala Val Val Arg Ala 20 25 30

Val Leu Glu Asp Asn Ser Ser Ser Val Asp Phe Ala Asp Leu Pro Ala 35 40 45

Leu Phe Gly Val Pro Leu Ala Pro Glu Gly Ile Arg Gly Tyr Leu Met 50 55 60

Glu Val Lys Pro Ala Asn Ala Cys His Pro Ile Glu Ala Pro Arg Leu 65 70 75 80

Gly Asn Arg Ser Leu Gly Ala Ile Val Leu Ile Arg Arg Tyr Asp Cys 85 90 95

Thr Phe Asp Leu Lys Val Leu Asn Ala Gln Arg Ala Gly Phe Glu Ala
100 105 110

Ala Ile Val His Asn Val His Ser Asp Asp Leu Val Ser Met Thr His 115 120 125

Val Tyr Glu Asp Leu Arg Gly Gln Ile Ala Ile Pro Ser Val Phe Val 130 135 140

Ser Glu Ala Ala Ser Gln Asp Leu Arg Val Ile Leu Gly Cys Asn Lys 145 150 155 160

Ser Ala His Ala Leu Leu Leu Pro Asp Asp Pro Pro Cys His Asp Leu 165 170 175

Gly Cys His Pro Val Leu Thr Val Ser Trp Val Leu Gly Cys Thr Leu 180 185 190

Ala Leu Val Val Ser Ala Phe Phe Val Leu Asn His Leu Trp Leu Trp 195 200 205

Ala Gln Ala Cys Cys Ser His Arg Arg Pro Val Lys Thr Ser Thr Cys 210 220

Gln Lys Ala Gln Val Arg Thr Phe Thr Trp His Asn Asp Leu Cys Ala 225 230 235 240

Ile Cys Leu Asp Glu Tyr Glu Glu Gly Asp Gln Leu Lys Ile Leu Pro 245 250 255

Cys Ser His Thr Tyr His Cys Lys Cys Ile Asp Pro Trp Phe Ser Gln 260 265 270

Ala Pro Arg Arg Ser Cys Pro Val Cys Lys Gln Ser Val Ala Ala Thr 275 280 285

Glu Asp Ser Phe Asp Ser Thr Thr Tyr Ser Phe Arg Asp Glu Asp Pro 290 295 300

Ser Leu Pro Gly His Arg Pro Pro Ile Trp Ala Ile Gln Val Gln Leu 305 310 315 320

Arg Ser Arg Arg Leu Glu Leu Leu Gly Arg Ala Ser Pro His Cys His 325 330 335

Cys Ser Thr Thr Ser Leu Glu Ala Glu Tyr Thr Thr Val Ser Ser Ala 340 345 350

Pro Pro Glu Ala Pro Gly Gln 355

<210> 1143

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1143 '

Met Trp His Thr Lys Pro Leu Gly Ser Gly Ser Cys Val Pro Leu Leu 1 5 10 15

Pro Leu Leu Leu Leu Leu Leu Leu Pro Leu Pro Trp Pro 20 25 30

Pro Pro Leu Pro Pro Pro Pro Pro Ser Ser Leu His Pro Phe Ala Pro 35 40 45

Ala Phe Pro Ala Thr Gly Ser Leu Ser Ser Asn Asn Ser Gln Leu Leu

50 55 60

Ala Pro Leu Arg Leu Gln Asn Ala Leu His Leu Phe Lys Cys Phe Pro
65 70 75 80

Val Leu Phe Pro Leu His Lys Ile Ile Ser Phe His Pro Glu Tyr Pro 85 90 95

Trp Gln Ala Pro Ile Phe Gln Tyr Phe Tyr Leu Ser Ile Pro Ser Ser 100 105 110

Ser Leu His Pro Glu His Leu Gly His Ser Phe Val Ser Thr Leu His 115 120 125

Ser Pro Thr Arg Gln 130

<210> 1144

<211> 86

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1144

Pro Cys Cys Phe His Lys Pro His Ala Ser His Ile Met Asn Phe Leu 1 5 10 15

Ile Arg Ile Gln Cys Ile Tyr Leu Pro Lys Ile Val Cys Ala Tyr Ser 20 25 30

Lys Tyr Glu Gln Phe Leu Asn Asn Gly Ser Ile Ile Phe Val Gln Asn 35 40 45

Ala Lys Asn Trp Gly Gln Ala Trp Trp His Thr Pro Val Ile Pro Ala 50 55 60

Leu Trp Glu Ala Lys Val Gly Xaa Ser Pro Glu Val Arg Ser Leu Arg 65 70 75 80

Pro Ala Trp Pro Ala Trp

<210> 1145

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1145

Met Trp His Thr Lys Pro Leu Gly Ser Gly Ser Cys Val Pro Leu Leu 1 5 19 15

Pro Leu Leu Leu Leu Leu Leu Phe Pro Leu Leu Pro Trp Fro

20 25 30

Pro Pro Leu Pro Pro Pro Pro Pro Ser Ser Leu His Pro Phe Ala Pro 35 40 45

Ala Phe Pro Ala Thr Gly Ser Leu Ser Ser Asn Asn Ser Gln Leu Leu 50 55 60

Ala Pro Leu Arg Leu Gln Asn Ala Leu His Leu Phe Lys Cys Phe Pro 65 70 75 80

Val Leu Phe Pro Leu His Lys Ile Ile Ser Phe His Pro Glu Tyr Pro 85 90 95

Trp Gln Ala Pro Ile Phe Gln Tyr Phe Tyr Leu Ser Ile Pro Ser Ser 100 105 110

Ser Leu His Pro Glu His Leu Gly His Ser Phe Val Ser Thr Leu His 115 120 125

Ser Pro Thr Arg Gln 130

<210> 1146

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (91)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1146

Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu Leu Pro Leu Leu 1 5 10 15

Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Asp
20 25 30

Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg Ala 35 40 45

Arg Ala Leu Ala Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly Gly 50 55 60

Cys Ser Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Glu 65 70 75 80

Leu Leu Arg Ser Arg Ala Leu Ala Thr Xaa Arg Arg Ser Ala Arg 85 90 95

Val Thr Gly

<211> 455

<212> PRT

<213> Homo sapiens

<400> 1147

Met Ala Ala Leu Leu Leu Leu Pro Leu Leu Leu Leu Pro Leu Leu 1 5 10 15

Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Asp 20 25 30

Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg Ala 35 40 45

Arg Ala Leu Ala Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly Pro 50 55 60

Cys Ile Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Arg 65 70 75 80

Asn Phe Leu Leu Arg Ser Arg Ala Leu Ala Thr Gln Arg Arg Ser Ala 85 90 95

Arg Val Thr Gly Leu Thr Arg Leu Pro Thr Cys Ala Arg Leu Gly Leu
100 105 110

Gly Thr Arg Arg Arg Gln Arg Arg Gly Glu Arg Trp Arg Arg Arg 115 120 125

Ala Gly Ser Ala Gly Ser Arg Arg Cys Ser Gly Arg Lys Arg Arg Gly 130 135 140

Val Cys Arg Arg Gly Arg Cys Arg Gln Arg Trp Arg Ser Arg Ala Pro 145 150 155 160

Leu Ser Pro Gly Ala Thr Val Ala Leu Leu Leu Pro Ala Gly Pro Glu 165 170 175

Phe Leu Trp Leu Trp Ile Gly Leu Ala Lys Ala Gly Leu Arg Thr Ala 180 185 190

Phe Val Pro Thr Ala Leu Arg Arg Gly Pro Leu Leu His Cys Leu Arg 195 200 205

Ser Cys Gly Ala Arg Ala Leu Val Leu Ala Pro Glu Phe Leu Glu Ser 210 215 220

Leu Glu Pro Asp Leu Pro Ala Leu Arg Ala Met Gly Leu His Leu Trp 225 230 235 240

Ala Ala Gly Pro Gly Thr His Pro Ala Gly Ile Ser Asp Leu Leu Ala 245 250 255

Glu Val Ser Ala Glu Val Asp Gly Pro Val Pro Gly Tyr Leu Ser Ser 260 255 270

Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr Ile Phe Thr Ser Gly Thr 275 280 \$\dagger\$ 285

Thr Gly Leu Pro Lys Ala Ala Arg Ile Ser His Leu Lys Ile Leu Gln

290 295 300

Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val His Gln Glu Asp Val Ile 305 310 315 320

Tyr Leu Ala Leu Pro Leu Tyr His Met Ser Gly Ser Leu Leu Gly Ile 325 330 335

Val Gly Cys Met Gly Ile Gly Ala Thr Val Val Leu Lys Ser Lys Phe 340 345 350

Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln Gln His Arg Val Thr Val 355 360 365

Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr Leu Val Asn Gln Pro Pro 370 375 380

Ser Lys Ala Glu Arg Gly His Lys Val Arg Leu Ala Val Gly Ser Gly 385 390 395 400

Leu Arg Pro Asp Thr Trp Glu Arg Phe Val Arg Arg Phe Gly Pro Leu 405 410 415

Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu Gly Asn Val Pro Pro Ser 420 425 430

Thr Thr Gln Asp Ser Gly Ala Leu Trp Gly Val Leu Pro Gly Phe Thr
435 440 445

Ser Ile Ser Ser Pro Ser Pro 450 455

<210> 1148

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (82)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (83)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
<222 > (91)
<223> Kaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1148
Met Met Leu Ile Pro Met Ala Ser Val Met Ala Val Thr Glu Pro Lys
                                     10
Trp Val Ser Val Trp Ser Arg Phe Leu Trp Val Thr Leu Leu Ser Met
                                 25
Val Leu Gly Ser Leu Leu Ala Leu Leu Leu Pro Leu Gly Ala Val Glu
Glu Gln Cys Leu Ala Val Leu Lys Gly Leu Tyr Leu Leu Arg Ser Lys
Pro Asp Arg Ala Gln His Ala Ala Pro Ser Ala Pro Xaa Arg Pro Arg
                                         75
Ser Xaa Xaa Ser Pro Xaa Gly Ala Arg Arg Xaa Leu Val Ala Lys Thr
                                     90
Lys Ala Phe Ser Ser Gly Val Lys Phe Gly Lys Ala Gln Glu Leu Ala
                                105
Leu Glu Pro Arg Pro Trp Lys Ile Lys Xaa Ala Xaa Gly Gln Ser Arg
                             120
        115
Gly Lys Lys Ala Gln Lys Ser Ser Phe Asn Ala Pro Pro Phe Lys Glu
                        135
Trp Asp Pro Gly Asn Phe Pro Gly Asp
145
                    150
<210> 1149
<211> 361
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
< 0.00>
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<021> SITE
<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1149

Ala Xaa Pro Xaa Gly Lys Leu Glu Ala Arg Ala Ala Leu As<br/>n Gl<br/>n Ala 1  $\phantom{0}$  5  $\phantom{0}$  10  $\phantom{0}$  15

Leu Glu Xaa Lys Arg Gln Gly Lys Arg Glu Lys Ala Gln Lys Leu Phe
20 25 30

Met His Ala Leu Lys Met Asp Pro Asp Phe Val Asp Ala Leu Thr Glu 35 40 45

Phe Gly Ile Phe Ser Glu Glu Asp Lys Asp Ile Ile Gln Ala Asp Tyr 50 55 60

Leu Tyr Thr Arg Ala Leu Thr Ile Ser Pro Tyr His Glu Lys Ala Leu 65 70 75 80

Val Asn Arg Asp Arg Thr Leu Pro Leu Val Glu Glu Ile Asp Gln Arg 85 90 95

Tyr Phe Ser Ile Ile Asp Ser Lys Val Lys Lys Val Met Ser Ile Pro 100 105 110

Lys Gly Asn Ser Ala Leu Arg Arg Val Met Glu Glu Thr Tyr Tyr His 115 120 125

His Ile Tyr His Thr Val Ala Ile Glu Gly Asn Thr Leu Thr Leu Ser 130 135 140

Glu Ile Arg His Ile Leu Glu Thr Arg Tyr Ala Val Pro Gly Lys Ser 145 150 155 160

Leu Glu Glu Gln Asn Glu Val Ile Gly Met His Ala Ala Met Lys Tyr 165 170 175

Ile Asn Thr Thr Leu Val Ser Arg Ile Gly Ser Val Thr Ile Ser Asp 180 185 190

Val Leu Glu Ile His Arg Arg Val Leu Gly Tyr Val Asp Pro Val Glu 195 200 205

Ala Gly Arg Phe Arg Thr Thr Gln Val Leu Val Gly His His Ile Pro 210 215 220

Pro His Pro Gln Asp Val Glu Lys Gln Met Gln Glu Phe Val Gln Trp 225 230 235 240

Leu Asn Ser Glu Glu Ala Met Asn Leu His Pro Val Glu Phe Ala Ala 245 250 255

Leu Ala His Tyr Lys Leu Val Tyr Ile His Pro Phe Ile Asp Gly Asn 260 265 270

Gly Arg Thr Ser Arg Leu Leu Met Asn Leu Ile Leu Met Gln Ala Gly

275 280 285

Tyr Pro Pro Ile Thr Ile Arg Lys Glu Gln Arg Ser Asp Tyr Tyr His 290 295 300

Val Leu Glu Ala Ala Asn Glu Gly Asp Val Arg Pro Phe Ile Arg Phe 305 310 315 320

Ile Ala Lys Cys Thr Glu Thr Thr Leu Asp Thr Leu Leu Phe Ala Thr 325 330 335

Thr Glu Tyr Ser Val Ala Leu Pro Glu Ala Gln Pro Asn His Ser Gly 340 345 350

Phe Lys Glu Thr Leu Pro Val Lys Pro 355 360

<210> 1150

<211> 458

<212> PRT

<213> Homo sapiens

<400> 1150

Met Met Leu Ile Pro Met Ala Ser Val Met Ala Val Thr Glu Pro Lys

1 10 15

Trp Val Ser Val Trp Ser Arg Phe Leu Trp Val Thr Leu Leu Ser Met 20 25 30

Val Leu Gly Ser Leu Leu Ala Leu Leu Leu Pro Leu Gly Ala Val Glu 35 40 45

Glu Gln Cys Leu Ala Val Leu Lys Gly Leu Tyr Leu Leu Arg Ser Lys 50 55 60

Pro Asp Arg Ala Gln His Ala Ala Thr Lys Cys Thr Ser Pro Ser Thr 65 70 75 80

Glu Leu Ser Ile Thr Ser Arg Gly Ala Thr Leu Leu Val Ala Lys Thr 85 90 95

Lys Ala Ser Pro Ala Gly Lys Leu Glu Ala Arg Ala Ala Leu Asn Gln
100 105 110

Ala Leu Glu Met Lys Arg Gln Gly Lys Arg Glu Lys Ala Gln Lys Leu 115 120 125

Phe Met His Ala Leu Lys Met Asp Pro Asp Phe Val Asp Ala Leu Thr 130 135 140

Glu Phe Gly Ile Phe Ser Glu Glu Asp Lys Asp Ile Ile Gln Ala Asp 145 150 155 160

Tyr Leu Tyr Thr Arg Ala Leu Thr Ile Ser Pro Tyr His Glu Lys Ala 165 170 175

Leu Val Asn Arg Asp Arg Thr Leu Pro Leu Val Glu Glu fle Asp Gln 180 185 190

Arg Tyr Phe Ser Ile Ile Asp Ser Lys Val Lys Lys Val Met Ser Ile 195 200 205

Pro Lys Gly Asn Ser Ala Leu Arg Arg Val Met Glu Glu Thr Tyr Tyr 210 215 220

His His Ile Tyr His Thr Val Ala Ile Glu Gly Asn Thr Leu Thr Leu 225 230 235 240

Ser Glu Ile Arg His Ile Leu Glu Thr Arg Tyr Ala Val Pro Gly Lys 245 250 255

Ser Leu Glu Glu Gln Asn Glu Val Ile Gly Met His Ala Ala Met Lys 260 265 270

Tyr Ile Asn Thr Thr Leu Val Ser Arg Ile Gly Ser Val Thr Ile Ser 275 280 285

Asp Val Leu Glu Ile His Arg Arg Val Leu Gly Tyr Val Asp Pro Val 290 295 300

Glu Ala Gly Arg Phe Arg Thr Thr Gln Val Leu Val Gly His His Ile 305 310 315 320

Pro Pro His Pro Gln Asp Val Glu Lys Gln Met Gln Glu Phe Val Gln 325 330 335

Trp Leu Asn Ser Glu Glu Ala Met Asn Leu His Pro Val Glu Phe Ala 340 345 350

Ala Leu Ala His Tyr Lys Leu Val Tyr Ile His Pro Phe Ile Asp Gly 355 360 365

As Gly Arg Thr Ser Arg Leu Leu Met As Leu Ile Leu Met Gln Ala 370 375 380

Gly Tyr Pro Pro Ile Thr Ile Arg Lys Glu Gln Arg Ser Asp Tyr Tyr 385 390 395 400

His Val Leu Glu Ala Ala Asn Glu Gly Asp Val Arg Pro Phe Ile Arg 405 410 415

Phe Ile Ala Lys Cys Thr Glu Thr Thr Leu Asp Thr Leu Leu Phe Ala 420 425 430

Thr Thr Glu Tyr Ser Val Ala Leu Pro Glu Ala Gln Pro Asn His Ser 435 440 445

Gly Phe Lys Glu Thr Leu Pro Val Lys Pro 450 455

<sup>&</sup>lt;210> 1151

<sup>&</sup>lt;211> 125

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1151

Ala Gln Arg Asn Pro Gly Ala Val Pro Ala Val Trp Arg Gln Ala Gly

Val Thr Phe Thr Ser Ala Lys Gly Arg Ser Ser Pro Tyr Trp Ser Leu

His Pro Gln Ile Ile Leu Leu Arg Lys Leu Ser Ser Ser Xaa Gln Lys 4.0

Pro Arg Ser Ser Ser Ala Gln Cys Gly Arg Asn Ala Ala Gly Leu

Pro His Cys Leu Arg Ala Ser Trp Ser Arg Leu Leu Lys Ile Glu Trp

Gln Val Gly Leu Ala Trp Ala Gly Ala Asp Val Leu Cys Gly His Pro . 90

Val Pro Lys Arg Pro Pro Thr Leu Gly Pro Gln Thr Ser Gly Ala Asp 105

Trp His Leu Arg Gly His Ser Pro Thr His Leu Leu Gln

<210> 1152

<211> 17

<212> PRT

<213> Homo sapiens

Met Leu Ser Gly Ser Leu Gly Ser Ala Val Cys Met Ser Ser Gln Pro

Arg .

<210> 1153

<211> 17

<212> PRT

<213> Homo sapiens

Met Leu Ser Gly Ser Leu Gly Ser Ala Val Cys Met Ser Ser Gln Pro 5

Arg

<210> 1154

<211> 254

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (218)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (228)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (240)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1154

Glu Thr Arg Leu His His Val Ser Thr Leu Ala Ala Phe Thr Val Arg  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Gln Val Gln Gln His Gln Gly Asn Leu Asp Ala Ser Gly Pro Ala Arg 20 25 30

Asp Leu Val Asp Ala Phe Leu Leu Lys Met Ala Gln Glu Gln Asn 35 40 45

Pro Gly Thr Glu Phe Thr Asn Lys Asn Met Leu Met Thr Val Ile Tyr 50 55 60

Leu Leu Phe Ala Gly Thr Met Thr Val Ser Thr Thr Val Gly Tyr Thr
65 70 75 80

Leu Leu Leu Met Lys Tyr Pro His Val Gln Lys Trp Val Arg Glu
85 90 95

Glu Leu Asn Arg Glu Leu Gly Ala Gly Gln Ala Pro Ser Leu Gly Asp 100 105 110

Arg Thr Arg Ser Leu Thr Pro Thr Arg Phe Cys Met Arg Arg Ser Gly 115 120 125

Cys Trp Arg Trp Cys Pro Trp Glu Tyr Pro Ala Pro Ser Cys Gly Pro 130 135 140

Pro Ala Ser Glu Gly Thr Pro Cys Pro Arg Ala Arg Arg Ser Ser Pro 145 150 155 160

Ser Leu Ala Pro Ser Cys Met Thr Pro Thr Ser Ser Ser Thr Gln Lys 165 170 175

Ser Ser Thr Gln Thr Val Ser Trp Met Gln Met Asp Gly Ser Gly Ser 180 185 190

Met Arg Arg Ser Cys Leu Leu Leu Lys Glu Ala Cys Leu Pro Trp Lys 195 200 205

Gly Pro Gly Lys Ser Gly Ala Leu Pro Xaa Leu His His Pro Thr

210 215 220

Ser Leu Leu Xaa Gly Glu Pro Val Pro Ala Gly His Pro Glu Pro Xaa 225 230 235 240

Ala His Arg Gln Trp Pro Phe Gln His Ser Pro Ser Leu Pro 245 250

<210> 1155

<211> 302

<212> PRT

<213> Homo sapiens

<400> 1155

Met Glu Ala Thr Gly Thr Trp Ala Leu Leu Leu Ala Leu Ala Leu Leu 1 5 10 15

Leu Leu Leu Thr Leu Ala Leu Ser Gly Thr Arg Ala Arg Gly His Leu 20 25 30

Pro Pro Gly Pro Thr Pro Leu Pro Leu Gly Asn Leu Leu Gln Leu 35 40 45

Arg Pro Gly Ala Leu Tyr Ser Gly Leu Met Arg Leu Ser Lys Lys Tyr 50 55

Gly Pro Val Phe Thr Ile Tyr Leu Gly Pro Trp Arg Pro Val Val Val 65 70 75 80

Leu Val Gly Gl<br/>n Glu Ala Val Arg Glu Ala Leu Gly Gly Gl<br/>n Ala Glu 85 90 95

Gly His Gly Val Phe Phe Ser Asn Gly Glu Arg Trp Arg Gln Leu Arg 115 120 125

Lys Phe Thr Met Leu Ala Leu Arg Asp Leu Gly Met Gly Lys Arg Glu 130 135 140

Gly Glu Glu Leu Ile Gln Ala Glu Ala Arg Cys Leu Val Glu Thr Phe 145 150 155 160

Gln Gly Thr Glu Gly Arg Pro Phe Asp Pro Ser Leu Leu Leu Ala Gln 165 170 175

Ala Thr Ser Asn Val Val Cys Ser Leu Leu Phe Gly Leu Arg Phe Ser 180 185 190

Tyr Glu Asp Lys Glu Phe Gln Ala Val Val Arg Ala Ala Gly Gly Thr 195 200 205

Leu Gly Val Ser Ser Gln Gly Gly Gln Val Ser Gly Trp Asp Pro 210 215 220

Ser Pro Thr Thr Phe Pro Glu Gly Ser Cys Gln Gly Pro Met Arg Thr 225 230 235 240

Ser Cys Pro Ser Pro His Arg Pro Thr Arg Cys Ser Pro Gly Ser Cys 245 250 255

Gly Pro Cys Gln Ala Pro Thr Ser Ser Ser Ser Thr Thr Ser Ala Pro 260 265 270

Trp Leu Pro Ser Gln Ser Gly Arg Cys Ser Ser Thr Arg Gly Thr Trp 275 280 285

Met Leu Arg Ala Pro His Val Thr Leu Ser Met Pro Ser Cys 290 295 300

<210> 1156

<211> 302

<212> PRT

<213> Homo sapiens

<400> 1156

Met Glu Ala Thr Gly Thr Trp Ala Leu Leu Leu Ala Leu Ala Leu Leu 1 5 10 15

Leu Leu Leu Thr Leu Ala Leu Ser Gly Thr Arg Ala Arg Gly His Leu 20 25 30

Pro Pro Gly Pro Thr Pro Leu Pro Leu Leu Gly Asn Leu Leu Gln Leu 35 40 45

Arg Pro Gly Ala Leu Tyr Ser Gly Leu Met Arg Leu Ser Lys Lys Tyr 50 55 60

Gly Pro Val Phe Thr Ile Tyr Leu Gly Pro Trp Arg Pro Val Val Val 65 70 75 80

Leu Val Gly Gln Glu Ala Val Arg Glu Ala Leu Gly Gly Gln Ala Glu 85 90 95

Glu Phe Ser Gly Arg Gly Thr Val Ala Met Leu Glu Gly Thr Phe Asp 100 , 105 110

Gly His Gly Val Phe Phe Ser Asn Gly Glu Arg Trp Arg Gln Leu Arg 115 120 125

Lys Phe Thr Met Leu Ala Leu Arg Asp Leu Gly Met Gly Lys Arg Glu 130 135 140

Gly Glu Glu Leu Ile Gln Ala Glu Ala Arg Cys Leu Val Glu Thr Phe 145 150 155 160

Gln Gly Thr Glu Gly Arg Pro Phe Asp Pro Ser Leu Leu Leu Ala Gln 165 170 175

Ala Thr Ser Asn Val Val Cys Ser Leu Leu Phe Gly Leu Arg Phe Ser 180 185 190

Tyr Glu Asp Lys Glu Phe Gln Ala Val Val Arg Ala Ala Gly Gly Thr
195 200 205

Leu Leu Gly Val Ser Ser Gln Gly Gly Gln Val Ser Gly Trp Asp Pro 210 215 220

Ser Fro Thr Thr Phe Pro Glu Gly Ser Cys Gln Gly Pro Met Arg Thr 225 230 235 240

Ser Cys Pro Ser Pro His Arg Pro Thr Arg Cys Ser Pro Gly Ser Cys 245 250 255

Gly Pro Cys Gln Ala Pro Thr Ser Ser Ser Ser Thr Thr Ser Ala Pro 260 265 270

Trp Leu Pro Ser Gln Ser Gly Arg Cys Ser Ser Thr Arg Gly Thr Trp 275 280 285

Met Leu Arg Ala Pro His Val Thr Leu Ser Met Pro Ser Cys 290 295 300

<210> 1157

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1157

Met Thr Ala Pro Val Pro Ala Pro Arg Ile Leu Leu Pro Leu Leu Leu 1 5 10 15

Leu Leu Leu Thr Pro Pro Pro Gly Ala Arg Gly Glu Val Cys Met
20 25 30

Ala Ser Arg Gly Leu Ser Leu Phe Pro Glu Ser Cys Pro Asp Phe Cys 35 40 45

Cys Gly Thr Cys Asp Asp Gln Tyr Cys Cys Ser Asp Val Leu Lys Lys 50 . 55 60

Phe Val Trp Ser Glu Glu Arg Cys Ala Val Pro Glu Ala Ser Val Pro 65 70 75 80

Ala Ser Val Glu Pro Val Glu Gln Leu Gly Ser Ala Leu Arg Phe Arg 85 90 95

Pro Gly Tyr Asn Asp Pro Met Ser Gly Phe Gly Ala Thr Leu Ala Val 100 105 110

Gly Leu Thr Ile Phe Val Leu Ser Val Val Thr Ile Ile Ile Cys Phe 115 120 125

Thr Cys Ser Cys Cys Cys Leu Tyr Lys Thr Cys Arg Arg Pro Arg Pro 130 135 140

Val Val Thr Thr Thr Ser Thr Thr Val Val His Ala Pro Tyr Pro 145 150 155 160

Gln Pro Pro Ser Val Pro Pro Ser Tyr Pro Gly Pro Ser Tyr Gln Gly
165 170 175

Tyr His Thr Met Pro Pro Gln Pro Gly Met Pro Ala Ala Pro Tyr Pro

180 185 190

Met Gln Tyr Pro Pro Pro Tyr Pro Ala Gln Pro Met Gly Pro Pro Ala 195 200 205

Tyr His Glu Thr Leu Ala Gly Gly Ala Ala Ala Pro Tyr Pro Ala Ser 210 215 220

Gln Pro Pro Tyr Asn Pro Ala Tyr Met Asp Ala Pro Lys Ala Ala Leu 225 230 235 240

<210> 1158

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1158

Met Thr Ala Pro Val Pro Ala Pro Arg Ile Leu Leu Pro Leu Leu 1 5 10 15

Leu Leu Leu Thr Pro Pro Pro Gly Ala Arg Gly Glu Val Cys Met
20 25 30

Ala Ser Arg Gly Leu Ser Leu Phe Pro Glu Ser Cys Pro Asp Phe Cys 35 40 45

Cys Gly Thr Cys Asp Asp Gln Tyr Cys Cys Ser Asp Val Leu Lys Lys 50 55 60

Phe Val Trp Ser Glu Glu Arg Cys Ala Val Pro Glu Ala Ser Val Pro 65 70 75 80

Ala Ser Val Glu Pro Val Glu Gln Leu Gly Ser Ala Leu Arg Phe Arg 85 90 95

Pro Gly Tyr Asn Asp Pro Met Ser Gly Phe Gly Ala Thr Leu Ala Val 100 105 110

Gly Leu Thr Ile Phe Val Leu Ser Val Val Thr Ile Ile Cys Phe 115 120 125

Thr Cys Ser Cys Cys Cys Leu Tyr Lys Thr Cys Arg Arg Pro Arg Pro 130 135 140

Val Val Thr Thr Thr Ser Thr Thr Val Val His Ala Pro Tyr Pro 145 150 155 160

Gln Pro Pro Ser Val Pro Pro Ser Tyr Pro Gly Pro Ser Tyr Gln Gly
165 170 175

Tyr His Thr Met Pro Pro Gln Pro Gly Met Pro Ala Ala Pro Tyr Pro 180 185 190

Met Gln Tyr Pro Pro Pro Tyr Pro Ala Gln Pro Met Gly Pro Pro Ala 195 200 205

Tyr His Glu Thr Leu Ala Gly Gly Ala Ala Ala Pro Tyr Pro Ala Ser 210 215 220

Gln Pro Pro Tyr Asn Pro Ala Tyr Met Asp Ala Pro Lys Ala Ala Leu 225 230 235 240

<210> 1159

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1159

Met Lys Gly Leu Arg Ser Leu Ala Ala Thr Thr Leu Ala Leu Phe Leu 1 5 10 15

Val Phe Val Phe Leu Gly Asn Ser Ser Cys Ala Pro Gln Arg Leu Leu 20 25 30

Glu Arg Arg Asn Trp Thr Pro Gln Ala Met Leu Tyr Leu Lys Gly Ala 35 40 45

Gln Gly Arg Arg Phe Ile Ser Asp Gln Ser Arg Arg Lys Asp Leu Ser 50 60

Asp Arg Pro Leu Pro Glu Arg Arg Ser Pro Asn Pro Gln Leu Leu Thr 65 70 75 80

Ile Pro Glu Ala Ala Thr Ile Leu Leu Ala Ser Leu Gln Lys Ser Pro 85 90 95

Glu Asp Glu Glu Lys Asn Phe Asp Gln Thr Arg Phe Leu Glu Asp Ser 100 105 110

Leu Leu Asn Trp 115

<210> 1160

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1160

Met Lys Gly Leu Arg Ser Leu Ala Ala Thr Thr Leu Ala Leu Phe Leu 1 5 10 15

Val Phe Val Phe Leu Gly Asn Ser Ser Cys Ala Pro Gln Arg Leu Leu 20 25 30

Glu Arg Arg Asn Trp Thr Pro Gln Ala Met Leu Tyr Leu Lys Gly Ala 35 40 45

Gln Gly Arg Arg Phe Ile Ser Asp Gln Ser Arg Arg Lys Asp Leu Ser

50 55 60

Asp Arg Pro Leu Pro Glu Arg Arg Ser Pro Asn Pro Gln Leu Leu Thr 65 70 75 80

Ile Pro Glu Ala Ala Thr Ile Leu Leu Ala Ser Leu Gln Lys Ser Pro 85 90 95

Glu Asp Glu Glu Lys Asn Phe Asp Gln Thr Arg Phe Leu Glu Asp Ser 100 105 110

Leu Leu Asn Trp 115

<210> 1161

<211> 426

<212> PRT

<213> Homo sapiens

<400> 1161

Val Val Pro Phe Ser Gly Met Leu Pro Pro Gly Ala Glu Lys Ala Val 1 5 10 15

Ala Ser Phe Val Thr Gln Leu Ala Ala Ala Glu Ala Leu Gln Lys Ala 20 25 30

Pro Asp Val Thr Thr Leu Pro Arg Asn Val Met Phe Val Phe Gln 35 40 45

Gly Glu Thr Phe Asp Tyr Ile Gly Ser Ser Arg Met Val Tyr Asp Met 50 60

Glu Lys Gly Lys Phe Pro Val Gln Leu Glu Asn Val Asp Ser Phe Val 65 70 75 80

Glu Leu Gly Gln Val Ala Leu Arg Thr Ser Leu Glu Leu Trp Met His \$85\$ 90 95

Thr Asp Pro Val Ser Gln Lys Asn Glu Ser Val Arg Asn Gln Val Glu
100 105 110

Asp Leu Leu Ala Thr Leu Glu Lys Ser Gly Ala Gly Val Pro Ala Val 115 120 125

Ile Leu Arg Arg Pro Asn Gln Ser Gln Pro Leu Pro Pro Ser Ser Leu 130 135 140

His Ser Gly Ala Phe His Asn Lys Tyr Tyr Gln Ser Ile Tyr Asp Thr 165 170 175

Ala Glu Asn Ile Asn Val Ser Tyr Pro Glu Trp Leu Ser Pro Glu Glu
180 185 190

Asp Leu Asn Phe Val Thr Asp Thr Ala Lys Ala Leu Ala Asp Val Ala 195 200 205

Thr Val Leu Gly Arg Ala Leu Tyr Glu Leu Ala Gly Gly Thr Asn Phe

Ser Asp Thr Val Gln Ala Asp Pro Gln Thr Val Thr Arg Leu Leu Tyr 230 235 Gly Phe Leu Ile Lys Ala Asn Asn Ser Trp Phe Gln Ser Ile Leu Arg 245 250 Gln Asp Leu Arg Ser Tyr Leu Gly Asp Gly Pro Leu Gln His Tyr Ile Ala Val Ser Ser Pro Thr Asn Thr Tyr Val Val Gln Tyr Ala Leu 280 Ala Asn Leu Thr Gly Thr Val Val Asn Leu Thr Arg Glu Gln Cys Gln Asp Pro Ser Lys Val Pro Ser Glu Asn Lys Asp Leu Tyr Glu Tyr Ser 310 315 Trp Val Gln Gly Pro Leu His Ser Asn Glu Thr Asp Arg Leu Pro Arg 325 330 Cys Val Arg Ser Thr Ala Arg Leu Ala Arg Ala Leu Ser Pro Ala Phe 345 Glu Leu Ser Gln Trp Ser Ser Thr Glu Tyr Ser Thr Trp Thr Glu Ser 360 365 Arg Trp Lys Asp Ile Arg Ala Arg Ile Phe Leu Ile Ala Ser Lys Glu Leu Glu Leu Ile Thr Leu Thr Val Gly Phe Gly Ile Leu Ile Phe Ser Leu Ile Val Thr Tyr Cys Ile Asn Ala Lys Ala Asp Val Leu Phe Ile Ala Pro Arg Glu Pro Gly Ala Val Ser Tyr 420 <210> 1162 <211> 417 <212> PRT <213> Homo sapiens <400> 1162 Met Ala Thr Ala Gly Gly Gly Ser Gly Ala Asp Pro Gly Ser Arg Gly 10

Leu Leu Arg Leu Leu Ser Phe Cys Val Leu Leu Ala Gly Leu Cys Arg 20 25 30

Gly Asn Ser Val Glu Arg Lys Ile Tyr Ile Fro Leu Asn Lys Thr Ala 40 45

Pro Cys Val Arg Leu Leu Asn Ala Thr His Gln Ile Gly Cys Gln Ser 55 Ser Ile Ser Gly Asp Thr Gly Val Ile His Val Val Glu Lys Glu Glu 70 75 Asp Leu Gln Trp Val Leu Thr Asp Gly Pro Asn Pro Pro Tyr Met Val Leu Leu Glu Ser Lys His Phe Thr Arg Asp Leu Met Glu Lys Leu Lys 105 Gly Arg Thr Ser Arg Ile Ala Gly Leu Ala Val Ser Leu Thr Lys Pro 120 Ser Pro Ala Ser Gly Phe Ser Pro Ser Val Gln Cys Pro Asn Asp Gly 135 Phe Gly Val Tyr Ser Asn Ser Tyr Gly Pro Glu Phe Ala His Cys Arg 150 155 Glu Ile Gln Trp Asn Ser Leu Gly Asn Gly Leu Ala Tyr Glu Asp Phe 170 Ser Phe Pro Ile Phe Leu Leu Glu Asp Glu Asp Glu Thr Lys Val Ile Lys Gln Cys Tyr Gln Asp His Asn Leu Ser Gln Asn Gly Ser Ala Pro 200 Thr Phe Pro Leu Cys Ala Met Gln Leu Phe Ser His Met His Ala Val 215 Ile Ser Thr Ala Thr Cys Met Arg Arg Ser Ser Ile Gln Ser Thr Phe Ser Ile Asn Pro Glu Ile Val Cys Asp Pro Leu Ser Asp Tyr Asn Val 250 Trp Ser Met Leu Lys Pro Ile Asn Thr Thr Gly Thr Leu Lys Pro Asp 265 Asp Arg Val Val Ala Ala Thr Arg Leu Asp Ser Arg Ser Phe Phe 280 Trp Asn Val Ala Pro Gly Ala Glu Ser Ala Val Ala Ser Phe Val Thr 290 295 Gln Leu Ala Ala Ala Glu Ala Leu Gln Lys Ala Pro Asp Val Thr Thr 315 Leu Pro Arg Asn Val Met Phe Val Phe Phe Gln Gly Glu Thr Phe Asp 325 Tyr Ile Gly Ser Ser Arg Met Val Tyr Asp Met Glu Lys Gly Lys Phe 345 Pro Val Gln Leu Glu Asn Val Asp Ser Phe Val Glu Leu Gly Gln Val 355 360

Ala Leu Arg Thr Ser Leu Glu Leu Trp Met His Thr Asp Pro Val Ser 370 375 380

Gln Lys Asn Glu Ser Val Arg Asn Gln Val Glu Asp Leu Leu Ala Thr 385 390 395 400

Leu Glu Thr Val Ser Tyr Ala His Leu Asn Leu Gln Gly Gly Glu Val 405 410 415

Leu

<210> 1163

<211> 709

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (216)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1163

Met Ala Thr Ala Gly Gly Ser Gly Ala Asp Pro Gly Ser Arg Gly 1 5 10 15

Leu Leu Arg Leu Leu Ser Phe Cys Val Leu Leu Ala Gly Leu Cys Arg 20 25 30

Gly Asn Ser Val Glu Arg Lys Ile Tyr Ile Pro Leu Asn Lys Thr Ala 35 40 45

Pro Cys Val Arg Leu Leu Asn Ala Thr His Gln Ile Gly Cys Gln Ser 50 60

Ser Ile Ser Gly Asp Thr Gly Val Ile His Val Val Glu Lys Glu Glu 65 70 75 80

Asp Leu Gln Trp Val Leu Thr Asp Gly Pro Asn Pro Pro Tyr Met Val
85 90 95

Leu Leu Glu Ser Lys His Phe Thr Arg Asp Leu Met Glu Lys Leu Lys 100 105 110

Gly Arg Thr Ser Arg Ile Ala Gly Leu Ala Val Ser Leu Thr Lys Pro 115 120 125

Ser Pro Ala Ser Gly Phe Ser Pro Ser Val Gln Cys Pro Asn Asp Gly 130 140

Phe Gly Val Tyr Ser Asn Ser Tyr Gly Pro Glu Phe Ala His Cys Arg 145 150 155 160

Glu Ile Gln Trp Asn Ser Leu Gly Asn Gly Leu Ala Tyr Glu Asp Phe 165 170 175

Ser Phe Pro Ile Phe Leu Leu Glu Asp Glu Asn Glu Thr Lys Val Ile 180 185 190

Lys Gln Cys Tyr Gln Asp His Asn Leu Ser Gln Asn Gly Ser Ala Pro 195 200 205

- Ser Phe Pro Leu Cys Ala Met Xaa Leu Phe Ser His Met His Ala Val 210 215 220
- Ile Ser Thr Ala Thr Cys Met Arg Arg Ser Ser Ile Gln Ser Thr Phe 225 236 235 240
- Ser Ile Asn Pro Glu Ile Val Cys Asp Pro Leu Ser Asp Tyr Asn Val 245 250 255
- Trp Ser Met Leu Lys Pro Ile Asn Thr Thr Gly Thr Leu Lys Pro Asp 260 265 270
- Asp Arg Val Val Val Ala Ala Thr Arg Leu Asp Ser Arg Ser Phe Phe 275 280 285
- Trp Asn Val Ala Pro Gly Ala Glu Ser Ala Val Ala Ser Phe Val Thr 290 . 295 300
- Gln Leu Ala Ala Ala Glu Ala Leu Gln Lys Ala Pro Asp Val Thr Thr 305 310 315 320
- Leu Pro Arg Asn Val Met Phe Val Phe Phe Gln Gly Glu Thr Phe Asp 325 330 335
- Tyr Ile Gly Ser Ser Arg Met Val Tyr Asp Met Glu Lys Gly Lys Phe 340 345 350
- Pro Val Gln Leu Glu Asn Val Asp Ser Phe Val Glu Leu Gly Gln Val
- Ala Leu Arg Thr Ser Leu Glu Leu Trp Met His Thr Asp Pro Val Ser 370 380
- Gln Lys Asn Glu Ser Val Arg Asn Gln Val Glu Asp Leu Leu Ala Thr 385 390 395 400
- Leu Glu Lys Ser Gly Ala Gly Val Pro Ala Val Ile Leu Arg Arg Pro 405 410 415
- Asn Gln Ser Gln Pro Leu Pro Pro Ser Ser Leu Gln Arg Phe Leu Arg 420 425 430
- Ala Arg Asn Ile Ser Gly Val Val Leu Ala Asp His Ser Gly Ala Phe 435 440 445
- His Asn Lys Tyr Tyr Gln Ser Ile Tyr Asp Thr Ala Glu Asn Ile Asn 450 455 460
- Val Ser Tyr Pro Glu Trp Leu Ser Pro Glu Glu Asp Leu Asn Phe Val 465 470 475 480
- Thr Asp Thr Ala Lys Ala Leu Ala Asp Val Ala Thr Val Leu Gly Arg
  485 490 495
- Ala Leu Tyr Glu Leu Ala Gly Gly Thr Asn Phe Ser Asp Thr Val Gln 500 505 510

Ala Asp Pro Gln Thr Val Thr Arg Leu Leu Tyr Gly Phe Leu Ile Lys 515 520 525

Ala Asn Asn Ser Trp Phe Gln Ser Ile Leu Arg Gln Asp Leu Arg Ser 530 540

Tyr Leu Gly Asp Gly Pro Leu Gln His Tyr Ile Ala Val Ser Ser Pro 545 550 555 560

Thr Asn Thr Tyr Val Val Gln Tyr Ala Leu Ala Asn Leu Thr Gly 565 570 575

Thr Val Val Asn Leu Thr Arg Glu Gln Cys Gln Asp Pro Ser Lys Val 580 585 590

Pro Ser Glu Asn Lys Asp Leu Tyr Glu Tyr Ser Trp Val Gln Gly Pro 595 600 605

Leu His Ser Asn Glu Thr Asp Arg Leu Pro Arg Cys Val Arg Ser Thr 610 620

Ala Arg Leu Ala Arg Ala Leu Ser Pro Ala Phe Glu Leu Ser Gln Trp 625 630 635 640

Ser Ser Thr Glu Tyr Ser Thr Trp Thr Glu Ser Arg Trp Lys Asp Ile 645 650 655

Arg Ala Arg Ile Phe Leu Ile Ala Ser Lys Glu Leu Glu Leu Ile Thr 660 665 670

Leu Thr Val Gly Phe Gly Ile Leu Ile Phe Ser Leu Ile Val Thr Tyr 675 680 685

Cys Ile Asn Ala Lys Ala Asp Val Leu Phe Ile Ala Pro Arg Glu Pro 690 695 700

Gly Ala Val Ser Tyr 705

<210> 1164

<211> 230

<212> PRT

<213> Homo sapiens

<400> 1164

Met Thr Gly Leu Tyr Glu Leu Val Trp Arg Val Leu His Ala Leu Leu  $1 ag{10}$ 

Cys Leu His Arg Thr Leu Thr Ser Trp Leu Arg Val Arg Phe Gly Thr 20 25 30

Trp Asn Trp Ile Trp Arg Arg Cys Cys Arg Ala Ala Ser Ala Ala Val\$35\$

Leu Ala Pro Leu Gly Phe Thr Leu Arg Lys Pro Pro Ala Val Gly Arg 50 60

Asn Arg Arg His His Arg His Pro Arg Gly Gly Ser Cys Leu Ala Ala 65 70 75 80

Ala His His Arg Met Arg Trp Arg Ala Asp Gly Arg Ser Leu Glu Lys
85 90 95

Leu Pro Val His Met Gly Leu Val Ile Thr Glu Val Glu Gln Glu Pro 100 105 110

Ser Phe Ser Asp Ile Ala Ser Leu Val Val Trp Cys Met Ala Val Gly 115 120 125

Ile Ser Tyr Ile Ser Val Tyr Asp His Gln Gly Ile Phe Lys Arg Asn 130 135 140

Asn Ser Arg Leu Met Asp Glu Ile Leu Lys Gln Gln Gln Glu Leu Leu 145 150 155 160

Gly Leu Asp Cys Ser Lys Tyr Ser Pro Glu Phe Ala Asn Ser Asn Asp 165 170 175

Lys Asp Asp Gln Val Leu Asn Cys His Leu Ala Val Lys Val Leu Ser 180 185 190

Ala Gly Arg Trp Lys Ser Arg Tyr Cys Lys Ser Cys Ser Gly Leu Leu 195 200 205

Pro Val Ser Ser Pro Glu Ala Lys Glu Thr His Arg Phe Gly Cys Arg 210 215 220

Tyr Val Ser Gln Phe Thr 225 230

<210> 1165

<211> 293

<212> PRT

<213> Homo sapiens

<400> 1165

Met Thr Gly Leu Tyr Glu Leu Val Trp Arg Val Leu His Ala Leu Leu 1 5 10 15

Cys Leu His Arg Thr Leu Thr Ser Trp Leu Arg Val Arg Phe Gly Thr 20 25 30

Trp Asn Trp Ile Trp Arg Arg Cys Cys Arg Ala Ala Ser Ala Ala Val\$35\$ 40 45

Leu Ala Pro Leu Gly Phe Thr Leu Arg Lys Pro Pro Ala Val Gly Arg 50 55 60

Asn Arg Arg His His Arg His Pro Arg Gly Gly Ser Cys Leu Ala Ala 65 70 75 80

Ala His His Arg Met Arg Trp Arg Ala Asp Gly Arg Ser Leu Glu Lys
85 90 95

Leu Pro Val His Met Gly Leu Val Ile Thr Glu Val Glu Glu Pro

100 105 110

Ser Phe Ser Asp Ile Ala Ser Leu Val Val Trp Cys Met Ala Val Gly 115 120 125

Asn Ser Arg Leu Met Asp Glu Ile Leu Lys Gln Gln Gln Glu Leu Leu 145 150 155 160

Gly Leu Asp Cys Ser Lys Tyr Ser Pro Glu Phe Ala Asn Ser Asn Asp \$165\$ \$170\$ \$175\$

Lys Asp Asp Gln Val Leu Asn Cys His Leu Ala Val Lys Val Leu Ser 180 185 190

Pro Glu Asp Gly Lys Ala Asp Ile Val Arg Ala Ala Gln Asp Phe Cys \$195\$

Gln Leu Val Ala Gln Lys Gln Lys Arg Pro Thr Asp Leu Asp Val Asp 210 215 220

Thr Leu Ala Ser Leu Leu Ser Ser Asn Gly Cys Pro Asp Pro Asp Leu 225 230 235 240

Val Leu Lys Phe Gly Pro Val Asp Ser Thr Leu Gly Phe Leu Pro Trp 245 250 255

His Ile Arg Leu Thr Glu Ile Val Ser Leu Pro Ser His Leu Asn Ile 260 265 270

Ser Tyr Glu Asp Phe Phe Ser Alá Leu Arg Gln Tyr Ala Ala Cys Glu 275 280 285

Gln Arg Leu Gly Lys 290

<210> 1166

<211> 173

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (85)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (128)

<223> Xaa equals any of the naturally occurring L-amino acids

< 3 3 0 >

<221> SITE

<222> (146)

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (168)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (172)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1166
Met Val Glu Glu Pro Gly Arg Phe Leu Pro Leu Trp Leu His Ile Leu
Leu Ile Thr Val Leu Leu Val Leu Ser Gly Ile Phe Ser Gly Leu Asn
Leu Gly Leu Met Ala Leu Asp Pro Met Glu Leu Arg Ile Val Gln Asn
         35
                            40
Cys Gly Thr Glu Lys Glu Arg Arg Tyr Ala Arg Lys Ile Glu Pro Ile
Arg Arg Lys Gly Asn Tyr Leu Leu Cys Ser Leu Leu Gly Asn Val
Leu Val Asn Thr Xaa Leu Thr Ile Leu Leu Asp Asn Leu Ile Gly Ser
Gly Leu Met Ala Val Ala Ser Ser Thr Ile Gly Ile Val Ile Phe Gly
                               105
Glu Ile Leu Pro Gln Ala Leu Cys Ser Arg His Gly Leu Ala Val Xaa
                           120
Ala Asn Thr Ile Leu Leu Thr Lys Phe Phe Met Leu Leu Thr Phe Pro
Leu Xaa Phe Pro Ile Ser Lys Leu Leu Asp Phe Phe Leu Gly Gln Xaa
Ile Arg Thr Val Tyr Asn Arg Xaa Lys Leu Met Xaa Met
                                   170
                165
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<210> 1167
<211> 173
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<201> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (168)
<003> Xaa equals any of the naturally occurring L-amino acids
< 220>
<221> SITE
<222> (172)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1167
Met Val Glu Glu Pro Gly Arg Phe Leu Pro Leu Trp Leu His Ile Leu
Leu Ile Thr Val Leu Leu Val Leu Ser Gly Ile Phe Ser Gly Leu Asn
Leu Gly Leu Met Ala Leu Asp Pro Met Glu Leu Arg Ile Val Gln Asn
Cys Gly Thr Glu Lys Glu Arg Arg Tyr Ala Arg Lys Ile Glu Pro Ile
     50
Arg Arg Lys Gly Asn Tyr Leu Leu Cys Ser Leu Leu Leu Gly Asn Val
Leu Val Asn Thr Ser Leu Thr Ile Leu Leu Asp Asn Leu Ile Gly Ser
                85
                                    90
Gly Leu Met Ala Val Ala Ser Ser Thr Ile Gly Ile Val Ile Phe Gly
                               105
Glu Ile Leu Pro Gln Ala Leu Cys Ser Arg His Gly Leu Ala Val Gly
                           120
Ala Asn Thr Ile Leu Leu Thr Lys Phe Phe Met Leu Leu Thr Phe Pro
Leu Xaa Phe Pro Ile Ser Lys Leu Leu Asp Phe Phe Leu Gly Gln Xaa
                           155
    150
Ile Arg Thr Val Tyr Asn Arg Xaa Lys Leu Met Xaa Met
                165
                                  170
<210> 1168
<211> 314
<212> PRT
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<213> Homo sapiens
<320>
<221> SITE
<222> (93)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1168

Glu Lys Ala Ala Gly Ala Gly Lys Ser His Leu Ala Ile Val Gln Lys 1 5 10 15

Val Asn Asn Glu Gly Glu Gly Asp Pro Phe Tyr Glu Val Leu Gly Leu 20 25 30

Val Thr Leu Glu Asp Val Ile Glu Glu Ile Ile Lys Ser Glu Ile Leu 35 40 45

Asp Glu Ser Asp Met Tyr Thr Asp Asn Arg Ser Arg Lys Arg Val Ser 50 60

Glu Lys Asn Lys Arg Asp Phe Ser Ala Phe Lys Asp Ala Asp Asn Glu 65 70 75 80

Leu Lys Val Lys Ile Ser Pro Gln Leu Leu Leu Ala Xaa His Arg Phe 85 90 95

Leu Ala Thr Glu Val Ser Gln Phe Ser Pro Ser Leu Ile Ser Glu Lys
100 105 110

Ile Leu Leu Arg Leu Leu Lys Tyr Pro Asp Val Ile Gln Glu Leu Lys
115 120 125

Phe Asp Glu His Asn Lys Tyr Tyr Ala Arg His Tyr Leu Tyr Thr Arg 130 135 140

Asn Lys Pro Ala Asp Tyr Phe Ile Leu Ile Leu Gln Gly Lys Val Glu 145 150 155 160

Val Glu Ala Gly Lys Glu Asn Met Lys Phe Glu Thr Gly Ala Phe Ser 165 170 175

Tyr Tyr Gly Thr Met Ala Leu Thr Ser Val Pro Ser Asp Arg Ser Pro 180 185 190

Ala His Pro Thr Pro Leu Ser Arg Ser Ala Ser Leu Ser Tyr Pro Asp 195 200 205

Arg Thr Asp Val Ser Thr Ala Ala Thr Leu Ala Gly Ser Ser Asn Gln 210 215 220

Phe Gly Ser Ser Val Leu Gly Gln Tyr Ile Ser Asp Phe Ser Val Arg 225 230 235 240

Ala Leu Val Asp Leu Gln Tyr Ile Lys Ile Thr Arg Gln Gln Tyr Gln
245 250 255

Asn Gly Leu Leu Ala Ser Arg Met Glu Asn Ser Pro Gln Phe Pro Ile 260 265 270

Asp Gly Cys Thr Thr His Met Glu Asn Leu Ala Glu Lys Ser Glu Leu 275 280 285

Pro Val Val Asp Glu Thr Thr Thr Leu Leu Asn Glu Arg Asn Ser Leu 290 295 300

Leu His Lys Ala Ser His Glu Asn Ala Ile 305 310

<210> 1169

<211> 604

<212> PRT

<213> Homo sapiens

<400> 1169

Met Val Glu Glu Pro Gly Arg Phe Leu Pro Leu Trp Leu His Ile Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Ile Thr Val Leu Leu Val Leu Ser Gly Ile Phe Ser Gly Leu Asn 20 25 30

Leu Gly Leu Met Ala Leu Asp Pro Met Glu Leu Arg Ile Val Gln Asn 35 40 45

Cys Gly Thr Glu Lys Glu Arg Arg Tyr Ala Arg Lys Ile Glu Pro Ile 50 60

Arg Arg Lys Gly Asn Tyr Leu Leu Cys Ser Leu Leu Leu Gly Asn Val 65 70 75 80

Leu Val Asn Thr Ser Leu Thr Ile Leu Leu Asp Asn Leu Ile Gly Ser  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Gly Leu Met Ala Val Ala Ser Ser Thr Ile Gly Ile Val Ile Phe Gly 100 105 110

Glu Ile Leu Pro Gln Ala Leu Cys Ser Arg His Gly Leu Ala Val Gly 115 120 125

Ala Asn Thr Ile Leu Leu Thr Lys Phe Phe Met Leu Leu Thr Phe Pro 130 140

Leu Ser Phe Pro Ile Ser Lys Leu Leu Asp Phe Phe Leu Gly Gln Glu 145 150 155 160

Ile Arg Thr Val Tyr Asn Arg Glu Lys Leu Met Glu Met Leu Lys Val 165 170 175

Thr Glu Pro Tyr Asn Asp Leu Val Lys Glu Glu Leu Asn Met Ile Gln 180 185 190 .

Gly Ala Leu Glu Leu Arg Thr Lys Thr Val Glu Asp Ile Met Thr Gln 195 200 205

Leu Gln Asp Cys Phe Met Ile Arg Ser Asp Ala Ile Leu Asp Phe Asn 210 215 220

Thr Met Ser Glu Ile Met Glu Ser Gly Tyr Thr Arg Ile Pro Val Phe 225 230 235 240

Glu Asp Glu Gln Ser Asn Ile Val Asp Ile Leu Tyr Val Lys Asp Leu 245 250 255

Ala Fhe Val Asp Pro Asp Asp Cys Thr Pro Leu Lys Thr Ile Thr Arg

|   |    |     |            | 260 |     |     |     |            | 265 |     |     |     |            | 270 |     |     |
|---|----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|
| F | he | Tyr | Asn<br>275 | His | Pro | Val | His | Phe<br>280 | Val | Phe | His | Asp | Thr<br>285 | Lys | Leu | Asp |

Gln Lys Val Asn Asn Glu Gly Glu Gly Asp Pro Phe Tyr Glu Val Leu 305 310 315 320

Ala Met Leu Glu Glu Phe Lys Lys Gly Lys Ser His Leu Ala Ile Val

- Gly Leu Val Thr Leu Glu Asp Val Ile Glu Glu Ile Ile Lys Ser Glu 325 330 335
- Ile Leu Asp Glu Ser Asp Met Tyr Thr Asp Asn Arg Ser Arg Lys Arg 340 345 350
- Val Ser Glu Lys Asn Lys Arg Asp Phe Ser Ala Phe Lys Asp Ala Asp 355 360 365
- Asn Glu Leu Lys Val Lys Ile Ser Pro Gln Leu Leu Leu Ala Ala His 370 375 380
- Arg Phe Leu Ala Thr Glu Val Ser Gln Phe Ser Pro Ser Leu Ile Ser 385 390 395 400
- Glu Lys Ile Leu Leu Arg Leu Leu Lys Tyr Pro Asp Val Ile Gln Glu
  405 410 415
- Leu Lys Phe Asp Glu His Asn Lys Tyr Tyr Ala Arg His Tyr Leu Tyr 420 425 430
- Thr Arg Asn Lys Pro Ala Asp Tyr Phe Ile Leu Ile Leu Gln Gly Lys 435 440 445
- Val Glu Val Glu Ala Gly Lys Glu Asn Met Lys Phe Glu Thr Gly Ala 450 460
- Phe Ser Tyr Tyr Gly Thr Met Ala Leu Thr Ser Val Pro Ser Asp Arg 465 470 475 480
- Ser Pro Ala His Pro Thr Pro Leu Ser Arg Ser Ala Ser Leu Ser Tyr 485 490 495
- Pro Asp Arg Thr Asp Val Ser Thr Ala Ala Thr Leu Ala Gly Ser Ser 500 505 510
- Asn Gln Phe Gly Ser Ser Val Leu Gly Gln Tyr Ile Ser Asp Phe Ser 515 520 525
- Val Arg Ala Leu Val Asp Leu Gln Tyr Ile Lys Ile Thr Arg Gln Gln 530 540
- Tyr Gln Asn Gly Leu Leu Ala Ser Arg Met Glu Asn Ser Pro Gln Phe 545 550 555 560
- Pro Ile Asp Gly Cys Thr Thr His Met Glu Asn Leu Ala Glu Lys Ser 565 570 575
- Glu Leu Pro Val Val Asp Glu Thr Thr Thr Leu Leu Asn Glu Arg Asn

580 585 590

Ser Leu Leu His Lys Ala Ser His Glu Asn Ala Ile 595 600

<210> 1170

<211> 189

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (169)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (172)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (180)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1170

Met Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu 1 5 10 15

Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala 20 25 30

Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala 35 40 45

Cys Gly Thr Val Gly Leu Leu Glu His Ser Phe Glu Ile Asp Asp 50 55 60

Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp 65 70 75 80

Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly
85 90 95

Arg Leu Arg Asp Val Ala Ala Leu Asn Gly Leu Tyr Arg Val Arg Ile  $100 \hspace{1cm} 105 \hspace{1cm} 110$ 

Pro Arg Arg Pro Gly Ala Leu Asp Gly Leu Glu Ala Gly Gly Tyr Val 115 120 125

Ser Ser Phe Val Pro Ala Cys Ser Leu Val Glu Ser His Leu Ser Asp 130 135 140

Gln Leu Thr Leu His Val Asp Val Ala Gly Asn Val Val Gly Val Ser 145 150 155 160

Val Val Thr His Pro Met Ala Pro Xaa Ser Pro Xaa Gly Phe Pro Leu 165 170 175

Pro Trp Ser Xaa Ala Glu Ile Leu Ala Thr Ile Gln Phe 180 185

<210> 1171

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1171

Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu Met Ala  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala Gly Thr 20 25 30

Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala Cys Gly 35 40 45

Thr Val Gly Leu Leu Glu His Ser Phe Glu Ile Leu Ala Thr Met 50 55 60

Pro Val Leu Thr Ser His Pro Pro Thr Pro Ser Pro Cys Ser Leu Gly 65 70 75 80

Thr Cys Arg Leu Leu Ser Ser Leu Cys Ala Phe Val Pro Gly Gly Leu 85 90 95

Thr Leu Leu Ser Leu Ala Gly Leu Gly Gly Pro Val Gln Ala Pro Ala 100 105 110

Ala Pro Pro Ser Leu 115

<210> 1172

<211> 241

<212> PRT

<213> Homo sapiens

<400> 1172

Met Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu 1 5 10 15

Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala 20 25 30

Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala 35 40 45

Cys Gly Thr Val Gly Leu Leu Glu His Ser Phe Glu Ile Asp Asp 50 55 60

Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp 65 70 75 80

Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly

85 9C 95

Arg Leu Arg Asp Val Ala Ala Leu Asn Gly Leu Tyr Arg Val Arg Ile 100 105 110

Pro Arg Arg Pro Gly Ala Leu Asp Gly Leu Glu Ala Gly Gly Tyr Val 115 120 125

Ser Ser Phe Val Pro Ala Cys Ser Leu Val Glu Ser His Leu Ser Asp 130 135 140

Gln Leu Thr Leu His Val Asp Val Ala Gly Asn Val Val Gly Val Ser 145 150 155 160

Val Val Thr His Pro Met Ala Pro Cys Ser Pro Arg Gly Phe Pro Pro 165 170 175

Ala His Gly Val Glu Pro Glu Ile Leu Ala Thr Met Pro Val Leu Thr
180 185 190

Ser His Pro Pro Thr Pro Ser Pro Cys Ser Leu Gly Thr Cys Arg Leu 195 200 205

Leu Ser Ser Leu Cys Ala Phe Val Pro Gly Gly Leu Thr Leu Leu Ser 210 220

Leu Ala Gly Leu Gly Gly Pro Val Gln Ala Pro Ala Ala Pro Pro Ser 225 230 235 240

Leu

<210> 1173

<211> 265

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (215)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1173

Met Phe Leu Leu Phe Leu Leu Thr Cys Glu Leu Ala Ala Glu Val Ala 1 5 10 15

Ala Glu Val Glu Lys Ser Ser Asp Gly Pro Gly Ala Ala Gln Glu Pro 20 25 30

Thr Trp Leu Thr Asp Val Pro Ala Ala Met Glu Phe Ile Ala Ala Thr 35 40 45

Glu Val Ala Val Ile Gly Phe Phe Gln Asp Leu Glu Ile Pro Ala Val 50 55 60

Pro Ile Leu His Ser Met Val Gln Lys Phe Pro Gly Val Ser Phe Gly 65 76 80

Ile Ser Thr Asp Ser Glu Val Leu Thr His Tyr Asn Ile Thr Gly Asn 85 90 95

Thr Ile Cys Leu Phe Arg Leu Val Asp Asn Glu Gln Leu Asn Leu Glu
100 105 110

Asp Glu Asp Ile Glu Ser Ile Asp Ala Thr Lys Leu Ser Arg Phe Ile 115 120 125

Glu Ile Asn Ser Leu His Met Val Thr Glu Tyr Asn Pro Val Thr Val 130 135 140

Ile Gly Leu Phe Asn Ser Val Ile Gln Ile His Leu Leu Ile Met 145 150 155 160

Asn Lys Ala Ser Pro Glu Tyr Glu Glu Asn Met His Arg Tyr Gln Lys 165 170 175

Ala Ala Lys Leu Phe Gln Gly Lys Ile Leu Phe Ile Leu Val Asp Ser 180 185 190

Gly Met Lys Glu Asn Gly Lys Val Ile Ser Phe Phe Lys Leu Lys Glu 195 200 205

Ser Gln Leu Pro Ala Leu Xaa Ile Tyr Gln Thr Leu Asp Asp Glu Trp 210 215 220

Asp Thr Leu Pro Thr Ala Glu Val Ser Val Glu His Val Gln Asn Phe 225 230 235 240

Cys Asp Gly Phe Leu Ser Gly Lys Leu Leu Lys Glu Asn Arg Glu Ser 245 250 255

Glu Gly Lys Thr Pro Lys Val Glu Leu 260 265

<210> 1174

<211> 265

<212> PRT

<213> Homo sapiens

<400> 1174

Met Phe Leu Leu Phe Leu Leu Thr Cys Glu Leu Ala Ala Glu Val Ala 1 5 10 15

Ala Glu Val Glu Lys Ser Ser Asp Gly Pro Gly Ala Ala Gln Glu Pro 20 25 30

Thr Trp Leu Thr Asp Val Pro Ala Ala Met Glu Phe Ile Ala Ala Thr 35 40 45

Glu Val Ala Val Ile Gly Phe Phe Gln Asp Leu Glu Ile Pro Ala Val 50 60

Pro Ile Leu His Ser Met Val Gln Lys Phe Pro Gly Val Ser Phe Gly 65 70 75 80

Ile Ser Thr Asp Ser Glu Val Leu Thr His Tyr Asn Ile Thr Gly Asn

85 90 95

Thr Ile Cys Leu Phe Arg Leu Val Asp Asn Glu Gln Leu Asn Leu Glu
100 105 110

Asp Glu Asp Ile Glu Ser Ile Asp Ala Thr Lys Leu Ser Arg Phe Ile 115 120 125

Glu Ile Asn Ser Leu His Met Val Thr Glu Tyr Asn Pro Val Thr Val 130 135 140

Ile Gly Leu Phe Asn Ser Val Ile Gln Ile His Leu Leu Leu Ile Met 145 150 155 160

Asn Lys Ala Ser Pro Glu Tyr Glu Glu Asn Met His Arg Tyr Gln Lys 165 170 175

Ala Ala Lys Leu Phe Gln Gly Lys Ile Leu Phe Ile Leu Val Asp Ser 180 185 190

Gly Met Lys Glu Asn Gly Lys Val Ile Ser Phe Phe Lys Leu Lys Glu 195 200 205

Ser Gln Leu Pro Ala Leu Ala Ile Tyr Gln Thr Leu Asp Asp Glu Trp 210 215 220

Asp Thr Leu Pro Thr Ala Glu Val Ser Val Glu His Val Gln Asn Phe 225 230 235 240

Cys Asp Gly Phe Leu Ser Gly Lys Leu Leu Lys Glu Asn Arg Glu Ser 245 250 255

Glu Gly Lys Thr Pro Lys Val Glu Leu 260 265

<210> 1175

<211> 158

<212> PRT

<213> Homo sapiens

<400> 1175

Met Arg Arg Thr Thr Leu Ser Leu Leu Trp Thr Gly Ser Leu Pro Ala 1 5 10 15

Pro Pro Ala Thr Thr Ser Gly Gly Ala Ala Cys Pro Ser Gly Arg Arg 20 25 30

Tyr Pro Gly Ala Gly Asn Ala Gly Ser Ala Thr Ser Gln Cys Gln Leu 35 40 45

Thr Arg Cys Gly Ala Trp Leu Ser Ser Thr Ala Arg Ser Val Gly Thr
50 60

Thr Ser Gly Ala Gly His Arg Trp Gly Pro Arg Pro Pro Ala Thr Gly
65 70 75 80

Ala Ala Ser Pro Cys Ile Gln His Gly Ser Ser Pro Arg Ala Gly Thr 85 90 95

Gly Thr Arg Ile Ala Ala Ala Pro Thr Leu Thr Pro Ala Gln Leu Pro 100 105 110

Thr Ala Thr Thr Gly Glu Ser Pro Thr Cys Leu Gly His Pro Val Leu 115 120 125

Thr Pro Arg Ala Gly Ser Arg Thr Thr Cys Pro Lys Cys Ser Thr Pro 130 135 140

<210> 1176

<211> 291

<212> PRT

<213> Homo sapiens

<400> 1176

Met Ser Gln Glu Gly Val Glu Leu Glu Lys Ser Val Arg Arg Leu Arg  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Glu Lys Phe His Gly Lys Val Ser Ser Lys Lys Ala Gly Ala Leu Met 20 25 30

Arg Lys Phe Gly Ser Asp His Thr Gly Val Gly Arg Ser Ile Val Tyr 35 40 45

Gly Val Lys Gln Lys Asp Gly Gln Glu Leu Ser Asn Asp Leu Asp Ala 50 55 60

Gln Asp Pro Pro Glu Asp Met Lys Gln Asp Arg Asp Ile Gln Ala Val 65 70 75 80

Ala Thr Ser Leu Leu Pro Leu Thr Glu Ala Asn Leu Arg Met Phe Gln 85 90 95

Arg Ala Gln Asp Asp Leu Ile Pro Ala Val Asp Arg Gln Phe Ala Cys 100 105 110

Ser Ser Cys Asp His Val Trp Trp Arg Arg Val Pro Gln Arg Lys Glu 115 120 125

Val Ser Arg Cys Arg Lys Cys Arg Lys Arg Tyr Glu Pro Val Pro Ala 130 135

Asp Lys Met Trp Gly Leu Ala Glu Phe His Cys Pro Lys Cys Arg His 145 150 155 160

Asn Phe Arg Gly Trp Ala Gln Met Gly Ser Pro Ser Pro Cys Tyr Gly - 165 170 175

Cys Gly Phe Pro Val Tyr Pro Thr Arg Ile Leu Pro Pro Arg Trp Asp 180 185 190

Arg Asp Pro Asp Arg Arg Ser Thr His Thr His Ser Cys Ser Ala Ala 195 200 205

Asp Cys Tyr Asn Arg Arg Glu Pro His Val Pro Gly Thr Ser Cys Ala 210 215 220

His Pro Lys Ser Arg Lys Gln Asn His Leu Pro Lys Val Leu His Pro 225 230 235 240

Ser Asn Pro His Ile Ser Ser Gly Ser Thr Val Ala Thr Cýs Leu Ser 245 250 255

Gln Gly Gly Leu Leu Glu Asp Leu Asp Asn Leu Ile Leu Glu Asp Leu 260 265 270

Lys Glu Glu Glu Glu Glu Glu Glu Glu Glu Asp Glu Glu Gly Gly 275 280 285

Pro Arg Glu 290

<210> 1177

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1177

Met Arg Gly Thr Gln Leu Val Leu Leu Ala Leu Val Leu Ala Ala Cys 1 5 10 15

Gly Glu Leu Ala Pro Ala Leu Arg Cys Tyr Val Cys Pro Glu Pro Thr 20 25 30

Gly Val Ser Asp Cys Val Thr Ile Ala Thr Cys Thr Thr Asn Glu Thr 35 40 45

Met Cys Lys Thr Thr Leu Tyr Ser Arg Glu Ile Val Tyr Pro Phe Gln 50

Gly Asp Ser Thr Val Thr Lys Ser Cys Ala Ser Lys Cys Lys Pro Ser 65 70 75 80

Asp Val Asp Gly Ile Gly Gln Thr Leu Pro Val Ser Cys Cys Asn Thr 85 90 95

Glu Leu Cys Asn Val Asp Gly Ala Pro Ala Leu Asn Ser Leu His Cys 100 105 110

Gly Ala Leu Thr Leu Leu Pro Leu Leu Ser Leu Arg Leu 115 120 125

<210> 1178

<211> 6

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1178 Gly Thr Gln Xaa Ala Leu 1 5

<210> 1179

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1179

Met Arg Gly Thr Gln Leu Val Leu Leu Ala Leu Val Leu Ala Ala Cys
1 5 10 15

Gly Glu Leu Ala Pro Ala Leu Arg Cys Tyr Val Cys Pro Glu Pro Thr 20 25 30

Gly Val Ser Asp Cys Val Thr Ile Ala Thr Cys Thr Thr Asn Glu Thr
35 40 45

Met Cys Lys Thr Thr Leu Tyr Ser Arg Glu Ile Val Tyr Pro Phe Gln 50 60

Gly Asp Ser Thr Val Thr Lys Ser Cys Ala Ser Lys Cys Lys Pro Ser 65 70 75 80

Asp Val Asp Gly Ile Gly Gln Thr Leu Pro Val Ser Cys Cys Asn Thr 85 90 95

Glu Leu Cys Asn Val Asp Gly Ala Pro Ala Leu Asn Ser Leu His Cys
100 105 110

Gly Ala Leu Thr Leu Leu Pro Leu Leu Ser Leu Arg Leu 115 120 125

<210> 1180

<211> 132

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (120)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1180

Met Pro Asp Val Gln Gly Pro Trp His Pro Ala His Pro Pro Ile Pro 1 5 10 15

Ser Ala Ala Leu Cys Leu Leu Trp Pro His Cys Leu Ala Ala Pro Lys

20 25 30

Tyr Ala Arg Pro Arg Cys Leu Leu Val Phe Val Leu Cys Asp Arg Ser 40 45

Ala Trp Asn Ile Leu Leu Tyr Ser Val Gly Ser Lys Val Ser Gly Leu 50 55 60

Cys Ser Asn Cys Ser Leu Val Pro Gly Val Val Ala His Thr Cys Asn 65 70 75 80

Pro Lys Val Pro Leu Gly Leu Gln Gly Cys Glu Leu Pro Cys Pro Ala 85 90 95

Glu His Leu Ile Phe Ser Lys Xaa Leu Ser Ser Cys Ala Thr Trp Ala 100 105 110

His Cys Phe Leu Gly Leu Ser Xaa Cys Trp Cys Leu His Pro His Pro 115 120 125

His Pro Ser Trp
130

<210> 1181

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1181

Ser Gly Leu Ala Trp Ala Leu Leu Leu Ser Leu Pro Gly Gly Leu Arg
1 5 10 15

Ser Ser Ser Ala Arg Leu Pro Pro Glu Pro Phe His Gly Gln Gly Leu 20 25 30

Ser Ser Val Gly Ala Ile Arg Arg Arg Val Cys Arg Ser Val Arg Leu 35 40 45

Gly Asp Pro Trp Gly Met Glu Gly Thr Thr Arg Pro Phe Pro Ser Val

Pro Cys Gln Ala Val Leu Thr Ala Ala Ser Ser Gln Gly Arg Lys Pro 65 70 75 80

Gly Gln Arg Gln Arg Leu Leu Val Pro Ser Ile Pro 85

<210> 1182

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1182

Thr Phe Arg Leu Val Ser Ala His Leu Lys Thr Arg Lys Leu Ile Asn 1 5 19

Pro Glu Ala Ala Glu Arg Arg Trp Arg Asp Trp Asp Ser Arg Gln Gly 20 25 30

- Trp Leu Ser Val Lys Met Gln Arg Val Ser Gly Leu Leu Ser Trp Thr 35 40 45
- Leu Ser Arg Val Leu Trp Leu Ser Gly Leu Ser Glu Pro Gly Ala Ala 50 55 60
- Arg Gln Pro Arg Ile Met Glu Glu Lys Ala Leu Glu Val Tyr Asp Leu 65 70 75 80
- Ile Arg Thr Ile Arg Asp Pro Glu Lys Pro Asn Thr Leu Glu Glu Leu 85 90 95
- Glu Val Val Ser Glu Ser Cys Val Glu Val Gl<br/>n Glu Ile As<br/>n Glu Glu 100 105 110
- Glu Tyr Leu Val Ile Ile Arg Phe Thr Pro Thr Val Pro His Cys Ser 115 120 125
- Leu Ala Thr Leu Ile Val Gly Asn Leu His Phe 130 135

<210> 1183

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1183

- Met Pro Asp Val Gln Gly Pro Trp His Pro Ala His Pro Pro Ile Pro  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$
- Ser Ala Ala Leu Cys Leu Euu Trp Pro His Cys Leu Ala Ala Pro Lys 20 25 30
- Tyr Ala Arg Pro Arg Cys Leu Leu Val Phe Val Leu Cys Asp Arg Ser 35 40 45
- Ala Trp Asn Ile Leu Leu Tyr Ser Val Gly Ser Lys Val Ser Gly Leu 50 60
- Cys Ser Asn Cys Ser Leu Val Pro Gly Val Val Ala His Thr Cys Asn 65 70 75 80
- Pro Lys Val Pro Leu Gly Leu Gln Gly Cys Glu Leu Pro Cys Pro Ala 85 90 95
- Glu His Leu Ile Phe Ser Lys Cys Leu Ser Ser Cys Ala Thr Trp Ala 100 105 110
- His Cys Phe Leu Gly Leu Ser Cys Cys Trp Cys Leu His Pro His Pro 115 120 125
- His Pro Ser Trp Pro Ala Pro Phe Leu Ser Arg Trp Ala His Val 130 135 140

<210> 1184

<211> 13

<212> PRT

<213> Homo sapiens

<400> 1184

Met Gly Gln Gly Ala Cys Lys Asn Met Ser Val Gly Ser 1 5 10

<210> 1185

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1185

Asn Ser Glu Lys Gly Gln Lys Lys Gln Arg Gly Pro Arg Trp Ile Cys

1 10 15

Gln Leu Phe Cys Arg Cys Phe Leu Pro Leu Leu Trp Val Val Cys Ser 20 25 30

Pro Leu Gln Thr Ser Ala Arg Arg Glu Gly Leu Asn Leu Pro Ala Pro 35 40 45

Gln Asp Leu Leu Pro Ser Gly Pro Ser Pro Ala Leu Arg Ser Leu Pro 50 55 60

Asp Arg Arg Val Asp Arg Ala Thr Trp Ala Ala Arg Glu Thr His Gly 65 · 70 75 80

Gly Pro Pro Cys Gly Gln Pro Cys Gln Leu Pro Pro Ser Pro Glu Leu 85 90 95

His Leu His Leu Glu Glu 100

<210> 1186

<211> 259

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (62)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1186

Ala Gly Ala Trp Val Ser Leu Gly Pro Cys Leu Phe Pro Ala Pro Ala 1 5 10 15

Asp Ser Glu Gln Arg Pro Trp Val Arg Arg Val Gly Val Gly Pro Leu 20 25 30

Pro Ala Glu Pro Gly Gln Gly Glu Leu Gln Glu Ser Pro Leu Cys Pro 35 40 45

Cys Ser Trp Asn Val Pro Gln Arg Pro His Leu Lys Gly Xaa Cys Ala 50 55 60

Gly Gly Val Ala Gln Ser His Thr Ala Ser Thr Leu Ser Ser Gly Thr 65 70 75 80

Gly Asp Ser Gly Cys Ser Gly Lys Gly Leu Leu Asp Val Thr Tyr Asn 85 90 95

Ser Val Arg Leu Glu Thr Asp Ala Gly Gly Gly Arg Ala Gly Pro Pro 100 105 110

Gly Ile Thr Asp His Arg Lys Met Gly Gly Gly Ser Arg Gly Pro Ala 115 120 125

Pro Thr Pro Ser Cys Leu Thr Leu Leu Ser Cys Pro His Pro Cys Ala 130 135 140

Phe Val Pro Glu Thr Arg Val Ala Thr Gln Ala Gly Pro Gly Ser Ser 145 150 155 160

Leu Ile Leu Pro Leu Pro Ser Glu Pro Cys Ser Ser Leu Pro Ser Pro 165 170 175

Leu Pro Pro Leu Pro Arg Arg Val Thr Ser Asp Arg Ala Pro Leu Ala 180 185 190

Ile Gln Gly Gly Ser Arg Gly Leu Asp Arg Arg Ala Arg Arg Leu Pro
195 200 205

Ala Val Ala Gly Ala Ser Cys Pro Cys Arg Val Gly Glu Leu Ser Gly 210 215 220

Arg Glu Pro Tyr Leu Pro Ser Ala Lys Thr Val Lys Val Tyr Arg Leu 225 230 235 240

Phe Thr Asp Phe Tyr Leu Asn Cys Lys Ser Ala Asp Phe Val Asn Val 245 . 250 255

Leu Gly Val

<210> 1187 ·

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1187

Met Gly Gln Gly Ala Cys Gln Lys Tyr Val Cys Trp Phe Leu Asn Val 1 5 10

Val Cys Pro Cys Pro Pro Gly Ser Gly Arg Val His Val Ser Pro His
20 25 30

Thr Cys Ala Arg Glu Gly Ala Ser Trp Arg Gly Asp Ser Arg Ala Arg 40 45

Gly Leu His Leu Trp Leu Pro Leu Ala Ser Leu Gly Gly Pro Gly Leu 50 60

Pro Gly Ser Gln Ala Leu Ser Cys Gly Thr Trp His Leu Ala Asp Gln 65 70 75 80

Leu Ala Gly Arg Lys Ile Gly Gly His Arg Ala Gly Gly Gln Cys Pro 85 90 95

Leu Pro Val Ser Ile Arg Ser Thr Cys His Cys Met Gln Pro Val Gly
100 105 110

Thr Phe Leu Ala Val Arg Asn 115

<210> 1188

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1188

Met Arg Gly Ser Val Glu Cys Thr Trp Gly Trp Gly His Cys Ala Pro 1 5 10 15

Ser Pro Leu Leu Trp Thr Leu Leu Leu Phe Ala Ala Pro Phe Gly 20 25 30

Leu Leu Gly Glu Lys Thr Arg Gln Val Ser Leu Glu Val Ile Pro Asn \$35\$ \$40\$ \$45

Trp Leu Gly Pro Leu Gln Asn Leu Leu His Ile Arg Ala Val Gly Thr 50 60

Asn Ser Thr Leu His Tyr Val Trp Ser Ser Leu Gly Pro Leu Ala Val 65 70 75 80

Val Met Val Ala Thr Asn Thr Pro His Ser Thr Leu Ser Val Asn Trp 85 90 95

Ser Leu Leu Ser Pro Glu Pro Asp Gly Gly Leu Met Val Leu Pro 100 105 110

Lys Asp Ser Ile Gln Phe Ser Ser Ala Leu Val Phe Thr Arg Leu Leu 115 120 125

Glu Phe Asp Ser Thr Asn Val Ser Asp Thr Ala Ala Lys Pro Leu Gly 130 135 140

Arg Pro Tyr Pro Pro Tyr Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile 145 155 160

Thr Asp Ser Leu Asp Pro Ala Thr Leu Ser Ala Thr Phe Gln Gly Thr
165 170 175

Pro

<210> 1189

<211> 330

<212> PRT

<213> Homo sapiens

<400> 1189

Arg Pro Thr Arg Pro Leu Asn Cys Gly Arg Met Arg Gly Ser Val Glu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Cys Thr Trp Gly Trp Gly His Cys Ala Pro Ser Pro Leu Leu Trp
20 25 30

Thr Leu Leu Phe Ala Ala Pro Phe Gly Leu Leu Gly Glu Lys Thr 35 40 45

Arg Gln Leu Leu Glu Phe Asp Ser Thr Asn Val Ser Asp Thr Ala Ala 50 60

Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr Ser Leu Ala Asp Phe Ser 65 70 75 80

Trp Asn Asn Ile Thr Asp Ser Leu Asp Pro Ala Thr Leu Ser Ala Thr 85 90 95

Phe Gln Gly His Pro Met Asn Asp Pro Thr Arg Thr Phe Ala Asn Gly 100 105 110

Ser Leu Ala Phe Arg Val Gln Ala Phe Ser Arg Ser Ser Arg Pro Ala 115 120 125

Gln Pro Pro Arg Leu Leu His Thr Ala Asp Thr Cys Gln Leu Glu Val 130 135 140

Ala Leu Ile Gly Ala Ser Pro Arg Gly Asn Arg Ser Leu Phe Gly Leu 145 150 155 160

Glu Val Ala Thr Leu Gly Gln Gly Pro Asp Cys Pro Ser Met Gln Glu 165 170 175

Gln His Ser Ile Asp Asp Glu Tyr Ala Pro Ala Val Phe Gln Leu Asp 180 185 190

Gln Leu Leu Trp Gly Ser Leu Pro Ser Gly Phe Ala Gln Trp Arg Pro 195 200 205

Val Ala Tyr Ser Gln Lys Pro Gly Gly Arg Glu Ser Ala Leu Pro Cys 210 215 220

Gln Ala Ser Pro Leu His Pro Ala Leu Ala Tyr Ser Leu Pro Gln Ser 225 230 235 240

Pro Ile Val Arg Ala Phe Phe Gly Ser Gln Asn Asn Phe Cys Ala Phe 245 250 255

Asn Leu Thr Phe Gly Ala Ser Thr Gly Pro Gly Tyr Trp Asp Gln His 260 265 270

Tyr Leu Ser Trp Ser Met Leu Leu Gly Val Gly Phe Pro Pro Val Asp 275 280 285

Gly Leu Ser Pro Leu Val Leu Gly Ile Met Ala Val Ala Leu Gly Ala 290 295 300

Pro Gly Leu Met Leu Leu Gly Gly Gly Leu Val Leu Leu Leu His His 305 310 310 320

Lys Lys Tyr Ser Glu Tyr Gln Ser Ile Asn 325 330

<210> 1190

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1190

Met Ala Ala Ser Arg Trp Ala Arg Lys Ala Val Val Leu Leu Cys Ala 1 5 10 15

Ser Asp Leu Leu Leu Leu Leu Leu Leu Pro Pro Gly Ser Cys
20 25 30

Ala Ala Glu Ala Arg Pro Gly Arg Pro Thr Ser Leu Pro His Leu Pro 35 40 45

Gly Arg Arg Arg Ile Phe Ala Ile Thr Met Met Gln Thr Trp Arg 50 60

Val Phe Trp Ser Asn Gly Arg Lys Met Met Thr Leu Lys Lys Glu Ile
65 70 75 80

Phe Gln Ser Thr Arg Asp Leu Gln His Leu Ser Thr Ser Gln Arg  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

<210> 1191

<211> 234

<212> PRT

<213> Homo sapiens

<400> 1191

Met Ala Ala Ser Arg Trp Ala Arg Lys Ala Val Val Leu Leu Cys Ala 1 5 10 15

Ser Asp Leu Leu Leu Leu Leu Leu Leu Pro Pro Gly Ser Cys
20 25 30

Ala Ala Glu Gly Ser Pro Gly Thr Pro Asp Glu Ser Thr Pro Pro Pro 35 40 45

Arg Lys Lys Lys Asp Ile Arg Asp Tyr Asn Asp Ala Asp Met Ala 50 55 60

Arg Leu Leu Glu Gln Trp Glu Lys Asp Asp Ile Glu Glu Gly Asp 65 70 75 80

Leu Pro Glu His Lys Arg Pro Ser Ala Pro Val Asp Phe Ser Lys Ile

PCT/US01/11988

85 90 95

Asp Pro Ser Lys Pro Glu Ser Ile Leu Lys Met Thr Lys Lys Gly Lys 105

Thr Leu Met Met Phe Val Thr Val Ser Gly Ser Pro Thr Glu Lys Glu 120

Thr Glu Glu Ile Thr Ser Leu Trp Gln Gly Ser Leu Phe Asn Ala Asn 135

Tyr Asp Val Gln Arg Phe Ile Val Gly Ser Asp Arg Ala Ile Phe Met 150 155

Leu Arg Asp Gly Ser Tyr Ala Trp Glu Ile Lys Asp Phe Leu Val Gly 170

Gln Asp Arg Cys Ala Asp Val Thr Leu Glu Gly Gln Val Tyr Pro Gly 185

Lys Gly Gly Gly Ser Lys Glu Lys Asn Lys Thr Lys Gln Asp Lys Gly

Lys Lys Lys Glu Gly Asp Leu Lys Ser Arg Ser Ser Lys Glu Glu 215

Asn Arg Ala Gly Asn Lys Arg Glu Asp Leu 225 230

<210> 1192

WO 01/77137

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1192

Met Arg Ala Leu Ser Gly Gly Glu Arg Ser Phe Ser Thr Val Cys Phe 10

Ile Leu Ser Leu Trp Ser Ile Ala Glu Ser Pro Phe Arg Cys Leu Asp

Glu Phe Asp Val Tyr Met Asp Met Val Asn Arg Arg Ile Ala Met Asp

Leu Ile Leu Lys Met Ala Asp Ser Gln Arg Phe Arg Gln Phe Ile Leu

Leu Thr Pro Gln Ser Met Ser Ser Leu Pro Ser Ser Lys Leu Ile Arg 70

Ile Leu Arg Met Ser Asp Pro Glu Arg Gly Gln Thr Thr Leu Pro Phe 85

Arg Pro Val Thr Gln Glu Glu Asp Asp Gln Arg 100 105

WO 01/7<sup>2</sup>13<sup>7</sup> PCT/US01/11988

<210> 1193

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1193

Met Arg Ala Leu Ser Gly Gly Glu Arg Ser Phe Ser Thr Val Cys Phe  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ile Leu Ser Leu Trp Ser Ile Ala Glu Ser Pro Phe Arg Cys Leu Asp 20 25 30

Glu Phe Asp Val Tyr Met Asp Met Val Asn Arg Arg Ile Ala Met Asp 40 45

Leu Ile Leu Lys Met Ala Asp Ser Gln Arg Phe Arg Gln Phe Ile Leu 50 55 60

Leu Thr Pro Gln Ser Met Ser Ser Leu Pro Ser Ser Lys Leu Ile Arg
65 70 75 80

Ile Leu Arg Met Ser Asp Pro Glu Arg Gly Gln Thr Thr Leu Pro Phe 85 90 95

Arg Pro Val Thr Gln Glu Glu Asp Asp Asp Gln Arg

<210> 1194

<211> 147

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1194

Arg Leu Leu His Phe Asn Cys His Ser Gly Phe Leu Thr Gln Ser Pro 1 5 10

Tyr Cys Arg Gln Ala Arg His Arg Xaa Leu His Gln Gly Xaa Xaa Pro  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Ala Ala Arg Leu Trp Cys Asp Cys Gln Arg Pro Ala Pro Arg Val

Ala Arg Thr Glu Leu Gly Arg His Thr Gly Ile His Gly Ser Thr Phe

50 55 60

Ser Ser Thr Thr Leu Gly Pro Ile Phe Trp Leu Leu Val Lys Ser Pro 65 70 75 80

Glu Leu Ala Ala Gln Pro Ser Thr Tyr Leu Ala Val Ala Glu Glu Leu 85 90 95

Ala Asp Val Ser Gly Lys Tyr Phe Asp Gly Leu Lys Gln Lys Ala Pro 100 105 110

Ala Pro Glu Ala Glu Asp Glu Glu Val Ala Arg Arg Leu Trp Ala Glu 115 120 125

Ser Ala Arg Leu Val Gly Leu Glu Ala Pro Ser Val Arg Glu Gln Pro 130 135 140

Leu Pro Arg 145

<210> 1195

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1195

Met Ser Arg Tyr Leu Leu Pro Leu Ser Ala Leu Gly Thr Val Ala Gly
1 5 10 15

Ala Ala Val Leu Leu Lys Asp Tyr Val Thr Gly Gly Ala Cys Pro Ser 20 25 30

Lys Ala Thr Ile Pro Gly Lys Thr Val Ile Val Thr Gly Ala Asn Thr 35 40 45

Gly Ile Gly Lys Gln Thr Ala Leu Glu Leu Ala Arg Arg Gly Gly Asn 50 55 60

Ile Ile Leu Ala Cys Arg Asp Met Glu Lys Cys Glu Ala Ala Ala Lys 65 70 75 80

Asp Ile Arg Gly Glu Thr Leu Asn His His Val Asn Ala Arg His Leu 85 90 95

Asp Leu Ala Ser Leu Lys Ser Ile Arg Glu Phe Ala Ala Lys Ile Ile 100 105 110

Glu Glu Glu Arg Val Asp Ile Leu Ile Asn Asn Ala Gly Val Met 115 120 125

Arg Cys Pro His Trp Thr Thr Glu Asp Gly Phe Glu Met Gln Phe Gly 130 135 140

Val Asn His Leu Gly His Phe Leu Leu Thr Asn Leu Leu Leu Asp Lys
145 150 155 160

Leu Lys Ala Ser Ala Pro Ser Arg Ile Ile Asn Leu Ser Ser Leu Ala 165 170 175

His Val Ala Gly His Ile Asp Phe Asp Asp Leu Asn Trp Gln Thr Arg 180 185 190

Lys Tyr Asn Thr Lys Ala Ala Tyr Cys Gln Ser Lys Leu Ala Ile Val 195 200 205

Leu Phe Thr Lys Glu Leu Ser Arg Arg Leu Gln Gly Thr Gly Ala Leu 210 215 220

Gly Ser Ala Ser Leu Leu Tyr Ser Glu Pro Arg Ala Ala Phe Pro 225 230 235 240

<210> 1196

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (142)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (160)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (162)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1196

Met Ala Val Ala Arg Leu Ala Ala Val Ala Ala Trp Val Pro Cys Arg 1 5 10 15

Ser Trp Gly Trp Ala Ala Val Pro Phe Gly Pro His Arg Gly Leu Ser 20 25 30

Val Leu Leu Ala Arg Ile Pro Gln Arg Ala Pro Arg Trp Leu Pro Ala 35 40 45

Cys Arg Gln Lys Thr Ser Leu Ser Phe Leu Asn Arg Pro Asp Leu Pro 50 55 60

Asn Leu Ala Tyr Lys Lys Leu Lys Gly Lys Ser Pro Gly Ile Ile Phe 65 70 75 80

Ile Pro Gly Tyr Leu Ser Tyr Met Asn Gly Thr Lys Ala Leu Ala Ile 85 90 95

Glu Glu Phe Cys Lys Ser Leu Gly His Ala Cys Ile Arg Phe Asp Tyr 100 105 110

Ser Gly Val Gly Ser Ser Asp Gly Asn Ser Glu Glu Ser Thr Leu Gly 115 120 125

Lys Trp Arg Lys Asp Val Leu Ser Ile Ile Asp Asp Leu Xaa Asp Gly 130 135 140

Ala Xaa Asn Cys Thr Thr Arg Glu Gly Leu Ala Leu Ile Gly 165 170

<210> 1197

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1197

Ile Leu Val Gly Ser Ser Leu Gly Gly Trp Leu Met Leu His Ala Ala 1 5 10 15

Ile Ala Arg Pro Glu Lys Val Val Ala Leu Ile Gly Val Ala Thr Ala 20 25 30

Ala Asp Thr Leu Val Thr Lys Phe Asn Gln Leu Pro Val Glu Leu Lys
35 40 45

Lys Glu Val Glu Met Lys Gly Val Trp Ser Met Pro Ser Lys Tyr Ser 50 60

Glu Glu Gly Val Tyr Asn Val Gln Tyr Ser Phe Ile Lys Glu Ala Glu 65 70 75 80

His His Cys Leu Leu His Ser Pro Ile Pro Val Asn Cys Pro Ile Arg \$90\$

Leu Leu His Gly Met Lys Asp Asp Ile Val Pro Trp His Thr Ser Met 100 105 110

Gln Val Ala Asp Arg Val Leu Ser Thr Asp Val Asp Val Ile Leu Arg 115 120 125

Lys His Ser Asp His Arg Met Arg Glu Lys Ala Asp Ile Gln Leu Leu 130 135 140

Val Tyr Thr Ile Asp Asp Leu Ile Asp Lys Leu Ser Thr Ile Val Asn 145 150 155 160

<sup>&</sup>lt;210> 1198

<sup>&</sup>lt;211> 306

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<400> 1198

Met Ala Val Ala Arg Leu Ala Ala Val Ala Ala Trp Val Pro Cys Arg 1 5 10 15

Ser Trp Gly Trp Ala Ala Val Pro Phe Gly Pro His Arg Gly Leu Ser 20 25 30

Val Leu Leu Ala Arg Ile Pro Gln Arg Ala Pro Arg Trp Leu Pro Ala 35 40 45

Cys Arg Gln Lys Thr Ser Leu Ser Phe Leu Asn Arg Pro Asp Leu Pro 50 55 60

Asn Leu Ala Tyr Lys Lys Leu Lys Gly Lys Ser Pro Gly Ile Ile Phe 65 70 75 80

Ile Pro Gly Tyr Leu Ser Tyr Met Asn Gly Thr Lys Ala Leu Ala Ile  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Glu Glu Phe Cys Lys Ser Leu Gly His Ala Cys Ile Arg Phe Asp Tyr 100 105 110

Ser Gly Val Gly Ser Ser Asp Gly Asn Ser Glu Glu Ser Thr Leu Gly 115 120 125

Lys Trp Arg Lys Asp Val Leu Ser Ile Ile Asp Asp Leu Ala Asp Gly 130 135

Pro Gln Ile Leu Val Gly Ser Ser Leu Gly Gly Trp Leu Met Leu His 145 150 155 160

Ala Ala Ile Ala Arg Pro Glu Lys Val Val Ala Leu Ile Gly Val Ala 165 170 175

Thr Ala Ala Asp Thr Leu Val Thr Lys Phe Asn Gln Leu Pro Val Glu 180 185 190

Leu Lys Lys Glu Val Glu Met Lys Gly Val Trp Ser Met Pro Ser Lys 195 200 205

Tyr Ser Glu Glu Gly Val Tyr Asn Val Gln Tyr Ser Phe Ile Lys Glu 210 215 220

Ala Glu His His Cys Leu Leu His Ser Pro Ile Pro Val Asn Cys Pro 225 230 235 240

Ile Arg Leu Leu His Gly Met Lys Asp Asp Ile Val Pro Trp His Thr 245 250 255

Ser Met Gln Val Ala Asp Arg Val Leu Ser Thr Asp Val Asp Val Ile 260 265 270

Leu Arg Lys His Ser Asp His Arg Met Arg Glu Lys Ala Asp Ile Gln 275 280 285

Leu Leu Val Tyr Thr Ile Asp Asp Leu Ile Asp Lys Leu Ser Thr Ile 290 295 300

Val Asn 305

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<210> 1199
<211> 205
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (189)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Gly Ser Trp Ala Leu Leu Trp Pro Pro Leu Leu Phe Thr Gly Leu
Leu Val Arg Pro Pro Gly Thr Met Ala Gln Ala Gln Tyr Cys Ser Val
Asn Lys Asp Ile Phe Glu Val Xaa Glu Asn Thr Asn Val Thr Glu Pro
Leu Val Asp Ile His Val Pro Glu Gly Gln Glu Val Thr Leu Gly Ala
Leu Ser Thr Pro Phe Ala Phe Arg Ile Gln Gly Asn Gln Leu Phe Leu
Asn Val Thr Pro Asp Tyr Glu Glu Lys Ser Leu Leu Glu Ala Gln Leu
Leu Cys Gln Ser Gly Gly Thr Leu Val Thr Gln Leu Arg Val Phe Val
Ser Val Leu Asp Val Asn Asp Asn Ala Pro Glu Phe Pro Phe Lys Thr
Lys Glu Ile Arg Val Glu Glu Asp Thr Lys Val Asn Ser Thr Val Ile
Pro Glu Thr Gln Leu Gln Ala Glu Asp Arg Asp Lys Asp Asp Ile Leu
                    150
                                        155
Val Tyr Thr Leu Gln Glu Met Thr Ala Gly Ala Ser Gly Leu Leu Leu
                165
Leu Val Ser Val Asn Arg Pro Pro Glu Leu Asp Arg Xaa Leu Thr Ser
                                185
Thr Ser Gly Glu His Asp Leu Leu Leu Ala Gly Ala Asp
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<210> 1200

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1200

Pro Gln Gly Gln Leu Gly Ala Arg Pro Gln Pro His Ala Arg Pro Gln
1 5 10 15

Ala Arg Gly Gly Thr Asp Ala Arg Arg Ala Arg Thr Pro Arg Pro Cys
20 25 30

Leu Pro Arg Arg Cys Pro Glu Pro Pro Ala Ala Ala Arg Ala Gly Gly
35 40 45

Ser Pro Thr Ala Val Arg Ser Ile Leu Thr Lys Glu Arg Arg Pro Glu 50 60

Gly Gly Tyr Lys Ala Val Trp Phe Gly Glu Asp Ile Gly Thr Glu Ala 65 70 75 80

Asp Val Val Leu Asn Ala Pro Thr Leu Asp Val Asp Gly Ala Ser 85 90 95

Asp Ser Gly Ser Gly Asp Glu Gly Glu Gly Ala Gly Arg Gly Gly 100 105 110

Pro Tyr Asp Ala Pro Gly Gly Asp Asp Ser Tyr Ile 115 120

<210> 1201

<211> 447

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (260)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1201

Phe Pro Ala Gly Ala Ala Ser Thr Val Leu Ala His Asn Lys Met Leu
1 5 10 15

Lys Val Ser Ala Val Leu Cys Val Cys Ala Ala Ala Trp Cys Ser Gln 20 25 30

Ser Leu Ala Ala Ala Ala Ala Val Ala Ala Ala Gly Gly Arg Ser Asp 35 40 45

Gly Gly Asn Phe Leu Asp Asp Lys Gln Trp Leu Thr Thr Ile Ser Gln 50 55 60

Tyr Asp Lys Glu Val Gly Gln Trp Asn Lys Phe Arg Asp Asp Asp Tyr 65 70 75 80

Phe Arg Thr Trp Ser Pro Gly Lys Pro Phe Asp Gln Ala Leu Asp Pro 85 90 95

Ala Lys Asp Pro Cys Leu Lys Met Lys Cys Ser Arg His Lys Val Cys Ile Ala Gln Asp Ser Gln Thr Ala Val Cys Ile Ser His Arg Arg Leu 120 Thr His Arg Met Lys Glu Ala Gly Val Asp His Arg Gln Trp Arg Gly Pro Ile Leu Ser Thr Cys Lys Gln Cys Pro Val Val Tyr Pro Ser Pro Val Cys Gly Ser Asp Gly His Thr Tyr Ser Phe Gln Cys Lys Leu Glu Tyr Gln Ala Cys Val Leu Gly Lys Gln Ile Ser Val Lys Cys Glu Gly 190 His Cys Pro Cys Pro Ser Asp Lys Pro Thr Ser Thr Ser Arg Asn Val 200 Lys Arg Ala Cys Ser Asp Leu Glu Phe Arg Glu Val Ala Asn Arg Leu 215 Arg Asp Trp Phe Lys Ala Leu His Glu Ser Gly Ser Gln Asn Lys Lys Thr Lys Thr Leu Leu Arg Pro Glu Arg Ser Arg Phe Asp Thr Ser Ile Leu Pro Ile Xaa Lys Asp Ser Leu Gly Trp Met Phe Asn Arg Leu Asp Thr Asn Tyr Asp Leu Leu Asp Gln Ser Glu Leu Arg Ser Ile Tyr 280 Leu Asp Lys Asn Glu Gln Cys Thr Lys Ala Phe Phe Asn Ser Cys Asp Thr Tyr Lys Asp Ser Leu Ile Ser Asn Asn Glu Trp Cys Tyr Cys Phe 310 315 Gln Arg Gln Gln Asp Pro Pro Cys Gln Thr Glu Leu Ser Asn Ile Gln 330 325 Lys Arg Gln Gly Val Lys Lys Leu Gly Gln Tyr Ile Pro Leu Cys 345 Asp Glu Asp Gly Tyr Tyr Lys Pro Thr Gln Cys His Gly Ser Val Gly 355 360 Gln Cys Trp Cys Val Asp Arg Tyr Gly Asn Glu Val Met Gly Ser Arg Ile Asn Gly Val Ala Asp Cys Ala Ile Asp Phe Glu Ile Ser Gly Asp 385 Phe Ala Ser Gly Asp Phe His Glu Trp Thr Asp Asp Glu Asp Asp Glu 405 410

Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu Asp Asp Asp Glu Asp 420 425 430

<210> 1202

<211> 551

<212> PRT

<213> Homo sapiens

<400> 1202

Met Gly Ser Trp Ala Leu Leu Trp Pro Pro Leu Leu Phe Thr Gly Leu 1 5 10 . 15

Leu Val Arg Pro Pro Gly Thr Met Ala Gln Ala Gln Tyr Cys Ser Val 20 25 30

Asn Lys Asp Ile Phe Glu Val Glu Glu Asn Thr Asn Val Thr Glu Pro 35 40 45

Leu Val Asp Ile His Val Pro Glu Gly Gln Glu Val Thr Leu Gly Ala 50 55 60

Leu Ser Thr Pro Phe Ala Phe Arg Ile Gln Gly Asn Gln Leu Phe Leu 65 70 75 80

Asn Val Thr Pro Asp Tyr Glu Glu Lys Ser Leu Leu Glu Ala Gln Leu 85 90 95

Leu Cys Gln Ser Gly Gly Thr Leu Val Thr Gln Leu Arg Val Phe Val 100 105 110

Ser Val Leu Asp Val Asn Asp Asn Ala Pro Glu Phe Pro Phe Lys Thr 115 120 125

Lys Glu Ile Arg Val Glu Glu Asp Thr Lys Val Asn Ser Thr Val Ile 130 135 140

Pro Glu Thr Gln Leu Gln Ala Glu Asp Arg Asp Lys Asp Asp Ile Leu 145 150 155 160

Phe Tyr Thr Leu Gln Glu Met Thr Ala Gly Ala Ser Asp Tyr Phe Ser 165 170 175

Leu Val Ser Val Asn Arg Pro Ala Leu Arg Leu Asp Arg Pro Leu Asp 180 185 190

Phe Tyr Glu Arg Pro Asn Met Thr Phe Trp Leu Leu Val Arg Asp Thr
195 200 205

Pro Gly Glu Asn Val Glu Pro Ser His Thr Ala Thr Ala Thr Leu Val 210 215 220

Leu Ash Val Val Pro Ala Asp Leu Arg Pro Pro Trp Phe Leu Pro Cys 235 236 240

Thr Phe Ser Asp Gly Tyr Val Cys Ile Gln Ala Gln Tyr His Gly Ala 250 Val Pro Thr Gly His Ile Leu Pro Ser Pro Leu Val Leu Arg Pro Gly 265 Pro Ile Tyr Ala Glu Asp Gly Asp Arg Gly Ile Asn Gln Pro Ile Ile Tyr Ser Ile Phe Arg Gly Asn Val Asn Gly Thr Phe Ile Ile His Pro 295 300 Asp Ser Gly Asn Leu Thr Val Ala Arg Ser Val Pro Ser Pro Met Thr Phe Leu Leu Val Lys Gly Gln Gln Ala Asp Leu Ala Arg Tyr Ser 325 330 Val Thr Gln Val Thr Val Glu Ala Val Ala Ala Ala Gly Ser Pro Pro 340 Arg Phe Pro Gln Ser Leu Tyr Arg Gly Thr Val Ala Arg Gly Ala Gly 360 Ala Gly Val Val Lys Asp Ala Ala Pro Ser Gln Pro Leu Arg Ile Gln Ala Gln Asp Pro Glu Phe Ser Asp Leu Asn Ser Ala Ile Thr Tyr Arg Ile Thr Asn His Ser His Phe Arg Met Glu Gly Glu Val Val Leu Thr Thr Thr Leu Ala Gln Ala Gly Ala Phe Tyr Ala Glu Val Ala Ala Pro Arg Arg Thr Ser Ala Ser Arg Trp Trp Ile Trp Arg Pro 440 Trp Ala Gly Cys Trp Val Arg Cys Cys Cys Trp Leu Ser Leu Ala Ser 455 Pro Ser Leu Ser Thr Ser Thr Met Ala Pro Gly Ser Ser Ala Ala Leu 470 475 Ala Lys Leu Arg Ser Pro Ser Pro Lys Ala Leu Thr Thr Arg Arg Ser 485 490 Ser Leu Thr Thr Arg Pro Thr Gly Arg Pro Ser Pro Ala Pro Arg Thr Thr Pro Ser Pro Arg Arg His Arg Cys Pro Gln Ser Pro His Pro Pro 515 Ala Leu Pro Pro Gln Ala Val Pro Leu Ser Pro Pro Gln Arg Pro Glu 535 540 Leu Ala Glu Ala Pro Arg Arg 545

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<210> 1203
<211> 71
<212> PRT
<213> Homo sapiens
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<222> (18)
<2235 Xaa equals any of the naturally occurring L-amino acids
<0220>
<221> SITE
<222 > (57)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1203
Phe Cys Lys Gly Gln Ala Ala Leu Ala Leu Ala Ala Cys Gly Val Leu
                                      1.0
                  5
Leu Xaa Ser Gly Gly Pro Ala Ala Ala Trp Glu Ala Asp Pro Ala Gly
Arg Cys Gly Arg Val Pro Thr Ala Arg Gly Arg Ser Trp Arg Lys Pro
         3.5
Leu Cys Gly Ala Phe Gln Pro Gly Xaa Ser Trp Pro Glu Ala Pro Arg
Arg Cys Arg Thr Ser Pro Cys
<210> 1204
<211> 52
<212> PRT
<213> Homo sapiens
<220>
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<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
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<001> SITE
<3012> (37)
	imes 223	imes Xaa equals any of the naturally occurring L-amino acids
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<220>

<221> SITE

<222> (49)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1204

Asn Ser Xaa Xaa Asp Pro Asp Asn Val Leu Trp Pro Gly Arg Trp Thr  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Gin Phe Cys Cys Ile Lys Val Lys Xaa Asp Phe Gln Glu Glu Ala Ser 20 25 30

Val Gly Val Ser Xaa Gly Gly Tyr Arg Ile Gly Val Asp Glu Asn Gln
35 40 45

Xaa Lys Gly Cys 50

<210> 1205

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1205

Val Phe Cys Lys Gly Gln Ala Ala Leu Ala Leu Ala Ala Cys Gly Val 1 5 10 15

Leu Leu Gly Ser Gly Gly Pro Ala Ala Ala Trp Glu Ala Asp Pro Arg 20 . 25 30

Gly Gln Val Trp Pro Cys Pro Asp Arg Ala Arg Thr Glu Val Gly Gly 40 45

Ser Pro Cys Ala Val Pro Ser Ser Pro Glu Glu Ala Gly Leu Lys Pro 50 55 60

Pro Gly Val Ala Glu Ala Ser Pro Cys Gln Arg Pro Lys Pro Arg Leu 65 70 75 80

Gly Phe Tyr Arg Cys Ser Phe Pro Ser Thr Trp Ser Pro Ser Thr Pro 85 90 95

Ser Ser Pro Asn Ser Gln Pro Pro Phe Phe Phe Phe Leu His Ala Ser 100 105 110

Lys Val Gln Gly Pro Gln Met Tyr Arg Ser Leu Met Tyr His Pro Ala 115 120 125

Arg Glu Pro Ala Asp Tyr Gln Ala Lys Lys 130 135

<210> 1206

<211> 193

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <220> <231> SITE <332> (142) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (147) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (155) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (162) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1206 Met Ala Gly Pro Thr Cys Arg Ser Leu Leu Leu Leu Lys Cys Leu Ala Glu Gly Arg Cys Leu Val Cys Pro Ser Pro Ser Val Val His Cys Leu 2.0 25 Val Ser Val Val Phe Gln Met Thr Ile Leu Arg Asp Leu Glu Lys Leu 40 Ala Gly Trp His Arg Ile Ala Ile Ile Phe Ile Leu Ser Gly Ile Thr 55 Gly Asn Leu Ala Ser Ala Ile Phe Leu Pro Tyr Arg Ala Glu Val Gly Pro Ala Gly Ser Gln Phe Gly Leu Leu Ala Cys Ser Ser Trp Ser Ser Ser Arg Ala Gly Arg Cys Trp Arg Gly Pro Gly Arg Pro Ser Ser Thr 105 Ser Arg Pro Ser Cys Ser Ser Trp Ser Ser Val Ala Ser Cys Pro Gly 120 115 Ser Thr His Arg Pro His Leu Arg Ala Ser Ser Xaa Ala Xaa Leu Leu Ala Phe Xaa Phe Leu Pro Tyr Ile Thr Phe Xaa His Gln Ala Thr Ser 145 150 155 Thr Xaa Ser Gly His Leu Ile Pro Gly Gly His Leu Ala Gly Pro Leu 165 170

Ala Gly Pro Ser Leu Ala Arg Pro Phe Gly Ala Trp Gly Leu Gly Thr

180 185 190

Phe

<210> 1207

<211> 349

<212> PRT

<213> Homo sapiens

<400> 1207

Gly Lys Leu Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp
1 5 10 15

Pro Arg Val Arg Asp Asp Thr Gly Pro Pro Met Asp Lys Ser Asp Leu 20 25 30

Gly Gln Lys Arg Thr Ser Gly Ala Val Cys His Gln Asp Pro Arg Thr 35 40 45

Cys Glu Glu Pro Ala Ser Ser Gly Ala His Ile Trp Pro Asp Asp Ile 50 55 60

Thr Lys Trp Pro Ile Cys Thr Glu Gln Ala Arg Ser Asn His Thr Gly 65 70 75 80

Phe Leu His Val Asp Cys Glu Ile Lys Gly Arg Pro Cys Cys Ile Gly 85 90 95

Thr Lys Gly Ser Cys Glu Ile Thr Thr Arg Glu Tyr Cys Glu Phe Met  $100 \cdot 105$  110

His Gly Tyr Phe His Glu Glu Ala Thr Leu Cys Ser Gln Val His Cys 115 120 125

Leu Asp Lys Val Cys Gly Leu Leu Pro Phe Leu Asn Pro Glu Val Pro 130 135 140

Asp Gln Phe Tyr Arg Leu Trp Leu Ser Leu Phe Leu His Ala Gly Val 145 150 155 160

Val His Cys Leu Val Ser Val Val Phe Gln Met Thr Ile Leu Arg Asp 165 170 175

Leu Glu Lys Leu Ala Gly Trp His Arg Ile Ala Ile Ile Phe Ile Leu 180 185 190

Ser Gly Ile Thr Gly Asn Leu Ala Ser Ala Ile Phe Leu Pro Tyr Arg 195 200 205

Ala Glu Val Gly Pro Ala Gly Ser Gln Phe Gly Leu Leu Ala Cys Leu 210 215 220

Phe Val Glu Leu Phe Gln Ser Trp Pro Leu Leu Glu Arg Pro Trp Lys 225 230 235 240

Ala Phe Leu Asn Leu Ser Ala Ile Val Leu Phe Leu Phe Ile Cys Gly 245 250 255

Leu Leu Pro Trp Ile Asp Asn Ile Ala His Ile Phe Gly Phe Leu Ser 260 265 270

- Gly Leu Leu Ala Phe Ala Phe Leu Pro Tyr Ile Thr Phe Gly Thr 275 280 285
- Ser Asp Lys Tyr Arg Lys Arg Ala Leu Ile Leu Val Ser Leu Leu Ala 290 295 300
- Phe Ala Gly Leu Phe Ala Ala Leu Val Leu Trp Leu Tyr Ile Tyr Pro 305 310 315 320
- Ile Asn Trp Pro Trp Ile Glu His Leu Thr Cys Phe Pro Phe Thr Ser 325 330 335
- Arg Phe Cys Glu Lys Tyr Glu Leu Asp Gln Val Leu His 340 345

<210> 1208

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1208

- Met Ala Gly Pro Thr Cys Arg Ser Leu Leu Leu Leu Lys Cys Leu Ala
  1 5 10 15
- Glu Gly Arg Cys Leu Val Cys Pro Ser Pro Ser Val Val His Cys Leu 20 25 30
- Val Ser Val Val Phe Gln Met Thr Ile Leu Arg Asp Leu Glu Lys Leu 35 40 45
- Ala Gly Trp His Arg Ile Ala Ile Ile Phe Ile Leu Ser Gly Ile Thr 50 55 60
- Gly Asn Leu Ala Ser Ala Ile Phe Leu Pro Tyr Arg Ala Glu Val Gly 65 70 75 80
- Pro Ala Gly Ser Gln Phe Gly Leu Leu Ala Cys Leu Phe Val Glu Leu 85 90 95
- Phe Gln Ser Trp Pro Leu Leu Glu Arg Pro Trp Lys Ala Phe Leu Asn 100 105 110
- Leu Ser Ala Ile Val Leu Phe Leu Phe Ile Cys Gly Leu Leu Pro Trp 115 120 125
- Ile Asp Asn Ile Ala His Ile Phe Gly Phe Leu Ser Gly Leu Leu Leu 130 135 140
- Ala Phe Ala Phe Leu Pro Tyr Ile Thr Phe Gly Thr Ser Asp Lys Tyr 145 150 155 160
- Arg Lys Arg Ala Leu Ile Ieu Val Ser Leu Leu Ala Phe Ala Gly Leu 165 170 175

Phe Ala Ala Leu Val Leu Trp Leu Tyr Ile Tyr Pro Ile Asn Trp Pro 180 185 190

Trp Ile Glu His Leu Thr Cys Phe Pro Phe Thr Ser Arg Phe Cys Glu 195 200 205

Lys Tyr Glu Leu Asp Gln Val Leu His 210 215

<210> 1209 <211> 207 <212> PRT

<213> Homo sapiens

<220>

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<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<222> (97)
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<223> Xaa equals any of the naturally occurring L-amino acids
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Met Tyr Tyr Ile Ala His Leu Leu Lys Gly Ala Leu Leu Phe Ile Thr
                                      10
Ile Ala Leu Ile Gly Ser Gly Trp Ala Phe Ile Lys Tyr Val Leu Ser
Asp Lys Glu Lys Lys Val Phe Gly Ile Val Ile Pro Met Gln Val Leu
        35
Ala Thr Trp Pro Thr Ser Ser Ser Ser Pro Ala Arg Lys Ala Pro Ala
                          5.5
Thr Thr Cys Cys Gly Xaa Xaa Xaa Pro Xaa Gly Pro His Leu Leu
```

65 70 75 80

Xaa Cys His Pro Val Pro Val Val Xaa Xaa His Pro Ala Ser Xaa Gly 85 90 95

Xaa Val Xaa Pro Gln Asp Gly Lys Xaa Ala Ser Glu Pro Gly Gln Ser 100 105 110

Leu Lys Leu Val Pro Gly Ile Tyr Tyr Val Met Gly His Leu Xaa Arg 115 120 125

Leu Leu Ser Pro Gly Ser Ile Gly His Pro Ala Cys Xaa Val Ala Trp 130 135 140

Cys Pro Phe Ser Ser Gly Lys Trp Ala Cys Thr Gln Ala Ser Trp Val 145 150 155 160

Gly Arg Ala Ser Thr Leu Gly Pro Xaa Phe Gly Ala Tyr Arg Ala Tyr 165 170 175

Lys Xaa Ser Gly Pro Gln Gly Asn Lys Pro Xaa Thr Leu Asn Leu Pro 180 185 190

Lys Xaa Gly Gln Gly Met Val Lys Met Glu Gln Val Met Asp 195 200 205

<210> 1210

<211> 553

<212> PRT

<213> Homo sapiens

<400> 1210

Val Asp Pro Arg Val Arg Val Ala Pro Glu Met Ala Val Ser Glu Arg 1 5 10 15

Arg Gly Leu Gly Arg Gly Ser Pro Ala Glu Trp Gly Gln Arg Leu Leu 2.0 25 30

Leu Val Leu Leu Gly Gly Cys Ser Gly Arg Ile His Arg Leu Ala 35 40 45

Leu Thr Gly Glu Lys Arg Ala Asp Ile Gln Leu Asn Ser Phe Gly Phe 50 60

Tyr Thr Asn Gly Ser Leu Glu Val Glu Leu Ser Val Leu Arg Leu Gly 65 70 75 80

Leu Arg Glu Ala Glu Glu Lys Ser Leu Leu Val Gly Phe Ser Leu Ser 85 90 95

Arg Val Arg Ser Gly Arg Val Arg Ser Tyr Ser Thr Arg Asp Phe Gln 100 105 110

Asp Cys Pro Leu Gln Lys Asn Ser Ser Ser Phe Leu Val Leu Phe Leu 115 120 125

Ile Asn Thr Lys Asp Leu Gln Val Gln Val Arg Lys Tyr Gly Glu Gln 130 135 140

| Lys<br>145 | Thr        | Leu        | Phe        | Ile        | Phe<br>150 | Pro        | Gly        | Leu        | Leu        | Pro<br>155 | Glu        | Ala        | Pro        | Ser        | Lys<br>160 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Pro        | Gly        | Leu        | Pro        | Lys<br>165 | Pro        | Gln        | Ala        | Thr        | Val<br>170 | Pro        | Arg        | Lys        | Val        | Asp<br>175 | Gly        |
| Gly        | Gly        | Thr        | Ser<br>180 | Ala        | Ala        | Ser        | Lys        | Pro<br>185 | Lys        | Ser        | Thr        | Pro        | Ala<br>190 | Val        | Ile        |
| Gln        | Gly        | Pro<br>195 | Ser        | Gly        | Lys        | Asp        | Lys<br>200 | Asp        | Leu        | Val        | Leu        | Gly<br>205 | Leu        | Ser        | His        |
| Leu        | Asn<br>210 | Asn        | Ser        | Tyr        | Asn        | Phe<br>215 | Ser        | Phe        | His        | Val        | Val<br>220 | Ile        | Gly        | Ser        | Gln        |
| Ala<br>225 | Glu        | Glu        | Gly        | Gln        | Tyr<br>230 | Ser        | Leu        | Asn        | Phe        | His<br>235 | Asn        | Cys        | Asn        | Asn        | Ser<br>240 |
| Val        | Pro        | Gly        | Lys        | Glu<br>245 | His        | Pro        | Phe        | Asp        | Ile<br>250 | Thr        | Val        | Met        | Ile        | Arg<br>255 | Glu        |
| Lys        | Asn        | Pro        | Asp<br>260 | Gly        | Phe        | Leu        | Ser        | Ala<br>265 | Ala        | Glu        | Met        | Pro        | Leu<br>270 | Phe        | Lys        |
| Leu        | Tyr        | Met<br>275 | Val        | Met        | Ser        | Ala        | Суs<br>280 | Phe        | Leu        | Ala        | Ala        | Gly<br>285 | Ile        | Phe        | Trp        |
| Val        | Ser<br>290 | Ile        | Leu        | Cys        | Arg        | Asn<br>295 | Thr        | Tyr        | Ser        | Val        | Phe<br>300 | Lys        | Ile        | His        | Trp        |
| Leu<br>305 | Met        | Ala        | Ala        | Leu        | Ala<br>310 | Phe        | Thr        | Lys        | Ser        | Ile<br>315 | Ser        | Leu        | Leu        | Phe        | His<br>320 |
| Ser        | Ile        | Asn        | Tyr        | Tyr<br>325 | Phe        | Ile        | Asn        | Ser        | Gln<br>330 | Gly        | His        | Pro        | Ile        | Glu<br>335 | Gly        |
| Leu        | Ala        | Val        | Met<br>340 | Туг        | Tyr        | Ile        | Ala        | His<br>345 | Leu        | Leu        | Lys        | Gly        | Ala<br>350 | Leu        | Leu        |
| Phe        | Ile        | Thr<br>355 | Ile        | Ala        | Leu        | Ile        | Gly<br>360 | Ser        | Gly        | Trp        | Ala        | Phe<br>365 | Ile        | Lys        | Tyr        |
| Val        | Leu<br>370 | Ser        | Asp        | Lys        | Glu        | Lys<br>375 | Lys        | Val        | Phe        | Gly        | Ile<br>380 | Val        | Ile        | Pro        | Met        |
| Gln<br>385 | Val        | Leu        | Ala        | Asn        | Val<br>390 | Ala        | Tyr        | Ile        | Ile        | Ile<br>395 | Glu        | Ser        | Arg        | Glu        | Glu<br>400 |
| Gly        | Ala        | Ser        | Asp        | Tyr<br>405 | Val        | Leu        | Trp        | Lys        | Glu<br>410 | Ile        | Leu        | Phe        | Leu        | Val<br>415 | Asp        |
| Leu        | Ile        | Cys        | Cys<br>420 | Gly        | Ala        | Ile        | Leu        | Phe<br>425 | Pro        | Val        | Val        | Trp        | Ser<br>430 | Ile        | Arg        |
| His        | Leu        | Gln<br>435 | Asp        | Ala        | Ser        | Gly        | Thr<br>440 | Asp        | Gly        | Lys        | Val        | Ala<br>445 | Val        | Asn        | Leu        |
| Ala        | Lys<br>450 | Leu        | Lys        | Leu        | Phe        | Arg<br>455 | His        | Tyr        | Tyr        | Val        | Met<br>460 | Val        | Ile        | Cys        | Tyr        |

Val Tyr Phe Thr Arg Ile Ile Ala Ile Leu Leu Gln Val Ala Val Pro 465 470 475 480

Phe Gln Trp Gln Trp Leu Tyr Gln Leu Leu Val Glu Gly Ser Thr Leu 485 490 495

Ala Phe Phe Val Leu Thr Gly Tyr Lys Phe Gln Pro Thr Gly Asn Asn 500 505 510

Pro Tyr Leu Gln Leu Pro Gln Glu Asp Glu Glu Asp Val Gln Met Glu 515 520 525

Gln Val Met Thr Asp Ser Gly Phe Arg Glu Gly Leu Ser Lys Val Asn 530 535 540

Lys Thr Ala Ser Gly Arg Glu Leu Leu 545 550

<210> 1211

<211> 543

<212> PRT

<213> Homo sapiens

<400> 1211

Met Ala Val Ser Glu Arg Arg Gly Leu Gly Arg Gly Ser Pro Ala Glu 1 5 15

Trp Gly Gln Arg Leu Leu Leu Val Leu Leu Leu Gly Gly Cys Ser Gly 20 25 30

Arg Ile His Arg Leu Ala Leu Thr Gly Glu Lys Arg Ala Asp Ile Gln 35 40 45

Leu Asn Ser Phe Gly Phe Tyr Thr Asn Gly Ser Leu Glu Val Glu Leu 50 60

Ser Val Leu Arg Leu Gly Leu Arg Glu Ala Glu Glu Lys Ser Leu Leu 65 70 75 80

Val Gly Phe Ser Leu Ser Arg Val Arg Ser Gly Arg Val Arg Ser Tyr . 85 90 95

Ser Thr Arg Asp Phe Gln Asp Cys Pro Leu Gln Lys Asn Ser Ser Ser 100 105 110

Phe Leu Val Leu Phe Leu Ile Asn Thr Lys Asp Leu Gln Val Gln Val 115 120 125

Arg Lys Tyr Gly Glu Gln Lys Thr Leu Phe Ile Phe Pro Gly Leu Leu 130 135 140

Pro Arg Lys Val Asp Gly Gly Gly Thr Ser Ala Ala Ser Lys Pro Lys 165 170 175 .

Ser Thr Pro Ala Val Ile Gln Gly Pro Ser Gly Lys Asp Lys Asp Leu 195 Val Leu Gly Leu Ser His Leu Asn Asn Ser Tyr Asn Phe Ser Phe His Val Val Ile Gly Ser Gln Ala Glu Glu Gly Gln Tyr Ser Leu Asn Phe His Asn Cys Asn Asn Ser Val Pro Gly Lys Glu His Pro Phe Asp Ile 235 230 Thr Val Met Ile Arg Glu Lys Asn Pro Asp Gly Phe Leu Ser Ala Ala Glu Met Pro Leu Phe Lys Leu Tyr Met Val Met Ser Ala Cys Phe Leu 265 Ala Ala Gly Ile Phe Trp Val Ser Ile Leu Cys Arg Asn Thr Tyr Ser Val Phe Lys Ile His Trp Leu Met Ala Ala Leu Ala Phe Thr Lys Ser 295 Ile Ser Leu Leu Phe His Ser Ile Asn Tyr Tyr Phe Ile Asn Ser Gln Gly His Pro Ile Glu Gly Leu Ala Val Met Tyr Tyr Ile Ala His Leu 330 325 Leu Lys Gly Ala Leu Leu Phe Ile Thr Ile Ala Leu Ile Gly Ser Gly 340 345 Trp Ala Phe Ile Lys Tyr Val Leu Ser Asp Lys Glu Lys Lys Val Phe 360 Gly Ile Val Ile Pro Met Gln Val Leu Ala Asn Val Ala Tyr Ile Ile 375 Ile Glu Ser Arg Glu Glu Gly Ala Ser Asp Tyr Val Leu Trp Lys Glu 395 Ile Leu Phe Leu Val Asp Leu Ile Cys Cys Gly Ala Ile Leu Phe Pro Val Val Trp Ser Ile Arg His Leu Gln Asp Ala Ser Gly Thr Asp Gly Lys Val Ala Val Asn Leu Ala Lys Leu Lys Leu Phe Arg His Tyr Tyr 440 Val Met Val Ile Cys Tyr Val Tyr Phe Thr Arg Ile Ile Ala Ile Leu Leu Gln Val Ala Val Pro Phe Gln Trp Gln Trp Leu Tyr Gln Leu Leu 475 470 Val Glu Gly Ser Thr Leu Ala Phe Phe Val Leu Thr Gly Tyr Lys Phe 490 435

Gln-Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp Glu 500 505 510

- Glu Asp Val Gln Met Glu Gln Val Met Thr Asp Ser Gly Phe Arg Glu 515 520 525
- Gly Leu Ser Lys Val Asn Lys Thr Ala Ser Gly Arg Glu Leu Leu 530 535 540

<210> 1212

<211> 204

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (162)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (204)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1212

Met Ala Ala Leu Ala Tyr Asn Leu Gly Lys Arg Glu Ile Asn His Tyr 1 5 10 15

Phe Ser Val Arg Ser Ala Lys Val Leu Ala Leu Val Ala Val Leu Leu 20 25 30

Leu Ala Ala Cys His Leu Ala Ser Arg Arg Tyr Arg Gly Asn Asp Ser 35 40 45

Cys Glu Tyr Leu Leu Ser Ser Gly Arg Phe Leu Gly Glu Lys Val Trp 50 55 60

Gln Pro His Ser Cys Met Met His Lys Tyr Lys Ile Ser Glu Ala Lys 65 70 75 80

Asn Cys Leu Val Asp Lys His Ile Ala Phe Ile Gly Asp Ser Arg Ile 85 90 95

Arg Gln Leu Phe Tyr Ser Phe Val Lys Ile Ile Asn Pro Gln Phe Lys 100 105 110

Glu Glu Gly Asn Lys His Glu Asn Ile Pro Phe Glu Asp Lys Thr Ala 115 120 125

Ser Val Lys Val Asp Phe Leu Trp His Pro Glu Val Asn Gly Ser Met 130 135 140

Lys Gln Cys Ile Lys Val Trp Thr Glu Asp Ser Ile Ala Lys Pro His 145 150 155 160

Val Xaa Val Ala Gly Ala Ala Thr Trp Ser Ile Lys Ile His Asn Gly 165 170 175 .

Ser Ser Glu Ala Leu Ser Gln Tyr Lys Met Asn Ile Thr Phe Ile Ala 180 185 190

Pro Leu Leu Glu Lys Leu Ala Lys Thr Ser Asp Xaa 195 200

<210> 1213

<211> 85

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1213

Glu Leu His Lys Pro Phe Glu Tyr Leu Ile Gln Asp Asn Gly Xaa Val 1 5 10 15

Leu Leu Gln Asn Asn Val Tyr Val Cys Met Tyr Ile Trp Phe Ser 20 25 30

Ile Tyr Ile Lys Gly Leu Asp Glu Pro Pro Lys Asn Trp Leu Arg Thr 35 40 45

Leu Gln Trp Asn Leu Gln Ala Ser Ile Cys Lys Ser Ala Arg His Lys 50 55 60

Thr Thr Cys Ser Leu Arg Ala Lys Arg Met Arg Phe Ser Gln Ile Leu 65 70 75 80

Ile Ile Leu Asn Val

<210> 1214

<211> 289

<212> PRT

<213> Homo sapiens

<400> 1214

Met Ala Ala Leu Ala Tyr Asn Leu Gly Lys Arg Glu Ile Asn His Tyr 1 10 15

Phe Ser Val Arg Ser Ala Lys Val Leu Ala Leu Val Ala Val Leu Leu 20 30

Leu Ala Ala Cys His Leu Ala Ser Arg Arg Tyr Arg Gly Asn Asp Ser 40 45

Cys Glu Tyr Leu Leu Ser Ser Gly Arg Phe Leu Gly Glu Lys Val Trp 50 55 60

Gln Pro His Ser Cys Met Met His Lys Tyr Lys Ile Ser Glu Ala Lys 55 70 75 30

Asn Cys Leu Val Asp Lys His Ile Ala Phe Ile Gly Asp Ser Arg Ile 85 90 95

Arg Gln Leu Phe Tyr Ser Phe Val Lys Ile Ile Asn Pro Gln Phe Lys 100 105 110

Glu Glu Gly Asn Lys His Glu Asn Ile Pro Phe Glu Asp Lys Thr Ala 115 120 125

Ser Val Lys Val Asp Phe Leu Trp His Pro Glu Val Asn Gly Ser Met 130 135 140

Lys Gln Cys Ile Lys Val Trp Thr Glu Asp Ser Ile Ala Lys Pro His 145 150 155 160

Val Ile Val Ala Gly Ala Ala Thr Trp Ser Ile Lys Ile His Asn Gly
165 170 175

Ser Ser Glu Ala Leu Ser Gln Tyr Lys Met Asn Ile Thr Ser Ile Ala 180 185 190

Pro Leu Leu Glu Lys Leu Ala Lys Thr Ser Asp Val Tyr Trp Val Leu 195 200 205

Gln Asp Pro Val Tyr Glu Asp Leu Leu Ser Glu Asn Arg Lys Met Ile 210 215 220

Thr Asn Glu Lys Ile Asp Ala Tyr Asn Glu Ala Ala Val Ser Ile Leu 225 230 235 240

Asn Ser Ser Thr Arg Asn Ser Lys Ser Asn Val Lys Met Phe Ser Val 245 250 255

Ser Lys Leu Ile Ala Gln Glu Thr Ile Met Glu Ser Leu Asp Gly Leu 260 265 270

His Leu Pro Glu Ser Ser Arg Glu Thr Val Arg Asn Phe Tyr Ile Cys 275 280 285

Gln

<210> 1215

<211> 215

<212> PRT

<213> Homo sapiens

<400> 1215

Cys Glu Val Arg Pro Glu Val Leu Phe Leu Thr Arg His Phe Ile Phe  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

His Asp Asn Asn Thr Trp Glu Gly His Tyr Tyr His Tyr Ser Asp 20 25 30

Pro Val Cys Lys His Pro Thr Phe Ser Ile Tyr Ala Arg Gly Arg Tyr 35 40 45

Ser Arg Gly Val Leu Ser Ser Arg Val Met Gly Gly Thr Glu Phe Val

50 55 60

Phe Lys Val Asn His Met Lys Val Thr Pro Met Asp Ala Ala Thr Ala 65 70 75 80

Ser Leu Leu Asn Val Phe Asn Gly Asn Glu Cys Gly Ala Glu Gly Ser 85 90 95

Trp Gln Val Gly Ile Gln Gln Asp Val Thr His Thr Asn Gly Cys Val

Ala Leu Gly Ile Lys Leu Pro His Thr Glu Tyr Glu Ile Phe Lys Met 115 120 125

Glu Gln Asp Ala Arg Gly Arg Tyr Leu Leu Phe Asn Gly Gln Arg Pro 130 135 140

Ser Asp Gly Ser Ser Pro Asp Arg Pro Glu Lys Arg Ala Thr Ser Tyr 145 150 155 160

Gln Met Pro Leu Val Gln Cys Ala Ser Ser Ser Pro Arg Ala Glu Asp 165 170 175

Leu Ala Glu Asp Ser Gly Ser Ser Leu Tyr Gly Arg Ala Pro Gly Arg

His Thr Trp Ser Leu Leu Leu Ala Ala Leu Ala Cys Leu Val Pro Leu 195 200 205

Leu His Trp Asn Ile Arg Arg 210 215

<210> 1216

<211> 466

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (268)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (458)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (460)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (461)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (463)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1216

Met Ser Trp Pro Arg Arg Leu Leu Arg Tyr Leu Phe Pro Ala Leu 1 5 10 15

Leu Leu His Gly Leu Gly Glu Gly Ser Ala Leu Leu His Pro Asp Ser 20 25 30

Arg Ser His Pro Arg Ser Leu Glu Lys Ser Ala Trp Arg Ala Phe Lys 35 40 45

Glu Ser Gln Cys His His Met Leu Lys His Leu His Asn Gly Ala Arg 50 55 60

Ile Thr Val Gln Met Pro Pro Thr Ile Glu Gly His Trp Val Ser Thr 65 70 75 80

Gly Cys Glu Val Arg Ser Gly Pro Glu Phe Ile Thr Arg Ser Tyr Arg 85 90 95

Phe Tyr His Asn Asn Thr Phe Lys Ala Tyr Gln Phe Tyr Tyr Gly Ser 100 105 110

Asn Arg Cys Thr Asn Pro Thr Tyr Thr Leu Ile Ile Arg Gly Lys Ile 115 120 125

Arg Leu Arg Gln Ala Ser Trp Ile Ile Arg Gly Gly Thr Glu Ala Asp 130 135 140

Tyr Gln Leu His Asn Val Gln Val Ile Cys His Thr Glu Ala Val Ala 145 150 155 160

Glu Lys Leu Gly Gln Gln Val Asn Arg Thr Cys Pro Gly Phe Leu Ala 165 170 175

Asp Gly Gly Pro Trp Val Gln Asp Val Ala Tyr Asp Leu Trp Arg Glu 180 185 190

Glu Asn Gly Cys Glu Cys Thr Lys Ala Val Asn Phe Ala Met His Glu 195 200 205

Leu Gln Leu Ile Arg Val Glu Lys Gln Tyr Leu His His Asn Leu Asp 210 215 220

His Leu Val Glu Glu Leu Phe Leu Gly Asp Ile His Thr Asp Ala Thr 225 230 235 240

Gln Arg Met Phe Tyr Arg Pro Ser Ser Tyr Gln Pro Pro Leu Gln Asn 245 250 255

Ala Lys Asn His Asp His Ala Cys Ile Ala Cys Xaa Ile Ile Tyr Arg 260 265 270

Ser Asp Glu His His Pro Pro Ile Leu Pro Pro Lys Ala Asp Leu Thr 275 280 285

Ile Gly Leu His Gly Glu Trp Val Ser Gln Arg Cys Glu Val Arg Pro

290 295 300

Glu Val Leu Phe Leu Thr Arg His Fhe Ile Phe His Asp Asn Asn Asn 305 310 315 320

Thr Trp Glu Gly His Tyr Tyr His Tyr Ser Asp Pro Val Cys Lys His 325 330 335

Pro Thr Phe Ser Ile Tyr Ala Arg Gly Arg Tyr Ser Arg Gly Val Leu 340 345 350

Ser Ser Arg Val Met Gly Gly Thr Glu Phe Val Phe Lys Val Asn His 355 360 365

Phe Asn Gly Asn Glu Cys Gly Ala Glu Gly Ser Trp Gln Val Gly Ile 385 390 395 400

Gln Gln Asp Val Thr His Thr Asn Gly Cys Val Ala Leu Gly Ile Lys
405
410
415

Leu Pro His Thr Glu Tyr Glu Ile Phe Lys Met Glu Gln Asp Ala Arg 420 425 430

Gly Arg Tyr Leu Leu Phe Asn Gly Gln Arg Pro Ser Asp Gly Ser Ser 435 440 445

Pro Asp Arg Pro Arg Arg Lys Lys Gly Xaa Lys Xaa Xaa Lys Xaa Ala 450 455 460

Pro Pro 465

<210> 1217

<211> 514

<212> PRT

<213> Homo sapiens

<400> 1217

Met Ser Trp Pro Arg Arg Leu Leu Arg Tyr Leu Phe Pro Ala Leu
1 10 15

Leu Leu His Gly Leu Gly Glu Gly Ser Ala Leu Leu His Pro Asp Ser 20 25 30

Arg Ser His Pro Arg Ser Leu Glu Lys Ser Ala Trp Arg Ala Phe Lys 35 40 45

Glu Ser Gln Cys His His Met Leu Lys His Leu His Asn Gly Ala Arg 50 60

Ile Thr Val Gln Met Pro Pro Thr Ile Glu Gly His Trp Val Ser Thr 65 70 75 80

Gly Cys Glu Val Arg Ser Gly Pro Glu Phe Ile Thr Arg Ser Tyr Arg 85 90 95

Phe Tyr His Asn Asn Thr Phe Lys Ala Tyr Gln Phe Tyr Tyr Gly Ser 100 105 Asn Arg Cys Thr Asn Pro Thr Tyr Thr Leu Ile Ile Arg Gly Lys Ile Arg Leu Arg Gln Ala Ser Trp Ile Ile Arg Gly Gly Thr Glu Ala Asp Tyr Gln Leu His Asn Val Gln Val Ile Cys His Thr Glu Ala Val Ala Glu Lys Leu Gly Gln Gln Val Asn Arg Thr Cys Pro Gly Phe Leu Ala 170 Asp Gly Gly Pro Trp Val Gln Asp Val Ala Tyr Asp Leu Trp Arg Glu 185 Glu Asn Gly Cys Glu Cys Thr Lys Ala Val Asn Phe Ala Met His Glu Leu Gln Leu Ile Arg Val Glu Lys Gln Tyr Leu His His Asn Leu Asp 215 His Leu Val Glu Glu Leu Phe Leu Gly Asp Ile His Thr Asp Ala Thr . 230 235 Gln Arg Met Phe Tyr Arg Pro Ser Ser Tyr Gln Pro Pro Leu Gln Asn 245 Ala Lys Asn His Asp His Ala Cys Ile Ala Cys Arg Ile Ile Tyr Arg Ser Asp Glu His His Pro Pro Ile Leu Pro Pro Lys Ala Asp Leu Thr 280 Ile Gly Leu His Gly Glu Trp Val Ser Gln Arg Cys Glu Val Arg Pro Glu Val Leu Phe Leu Thr Arg His Phe Ile Phe His Asp Asn Asn Asn 305 310 315 Thr Trp Glu Gly His Tyr Tyr His Tyr Ser Asp Pro Val Cys Lys His Pro Thr Phe Ser Ile Tyr Ala Arg Gly Arg Tyr Ser Arg Gly Val Leu Ser Ser Arg Val Met Gly Gly Thr Glu Phe Val Phe Lys Val Asn His Met Lys Val Thr Pro Met Asp Ala Ala Thr Ala Ser Leu Leu Asn Val 375 Phe Asn Gly Asn Glu Cys Gly Ala Glu Gly Ser Trp Gln Val Gly Ile Gln Gln Asp Val Thr His Thr Asn Gly Cys Val Ala Leu Gly Ile Lys 410

Leu Pro His Thr Glu Tyr Glu Ile Phe Lys Met Glu Gln Asp Ala Arg 420 425 430

Gly Arg Tyr Leu Leu Fhe Asn Gly Gln Arg Pro Ser Asp Gly Ser Ser 435 440 445

Pro Asp Arg Pro Glu Lys Arg Ala Thr Ser Tyr Gln Met Pro Leu Val 450 460

Gln Cys Ala Ser Ser Ser Pro Arg Ala Glu Asp Leu Ala Glu Asp Ser 465 470 475 480

Gly Ser Ser Leu Tyr Gly Arg Ala Pro Gly Arg His Thr Trp Ser Leu 485 490 495

Leu Leu Ala Ala Leu Ala Cys Leu Val Pro Leu His Trp Asn Ile 500 505 510

Arg Arg

<210> 1218

<211> 36

<212> PRT

<213> Homo sapiens

<400> 1218

Met Asn Asn Ser Ile Ala Ala Gln Ala Ser Lys Phe Val Ile Leu Tyr 1 5 10 15

Leu Phe Ile Leu Ser Phe Pro Lys Gln Cys Ile Cys His Ile Leu Ser 20 25 30

Glu Met Val Trp 35

<210> 1219

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1219

Gln Ala Ser Lys Ser Leu Leu Pro His Gly Ile His Thr Ile Leu Asn 1 5 10 15

Val Ile Tyr Ile Asn Leu Thr Ser Val Gly Ile Met Thr Met Cys Met 20 25 30

Lys Cys Asn Leu Pro Lys Lys Phe Leu Arg Asp Ser Val Ser Lys Val

Leu Ile Asp Ser Trp Ser His Arg Tyr Leu Leu Thr Ser Met Tyr Gln 50 55 60

Tyr Ser Ard Leu Ser Glu Glu Lys Gln Val Ile Ser Ile Tyr Cys Ile

65 70 75 80

Ile Tyr Thr Asn Asn Leu Gly Thr Leu Lys Asp Ser Tyr Gln Leu Gly 85 90 95

Trp Trp Glu Pro Ser 100

<210> 1220

<211> 178

<212> PRT

<213> Homo sapiens

<400> 1220

His Leu Leu Glu Val Thr Pro Cys Arg Leu Pro Val Pro Glu Phe Pro 1 5 10 15

Gly Arg Thr Pro Arg Gly Ser Arg Thr Pro Asp Met Arg Arg Leu Leu 20 25 30

Leu Val Thr Ser Leu Val Val Val Leu Leu Trp Glu Ala Gly Ala Val 35 40 45

Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val Lys His Trp Pro Ser 50 55 60

Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg Val Val Glu Pro Pro 65 70 75 80

Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro Val Gln Lys Pro Lys 85 90 95

Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln Gly Arg Gly Pro Ile 100 105 110

Leu Pro Gly Thr Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg
115 120 125

Val Leu Ser Pro Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro 130 135 140

Glu Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn 145 150 155 160

His Gln Val Leu Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His 165 170 175

Pro Gln

<210> 1221

<211> 40

<212> PRT

<213> Homo sapiens

<400> 1221

Met Asn Asn Ser Ile Ala Ala Gln Ala Ser Lys Phe Val Ile Leu Tyr 1 10 15

Let Fhe Ile Let Ser Fhe Pro Lys Gln Cys Ile Cys His Ile Let Val 20 25 30

Arg Trp Ser Gly Lys Ser His Phe 35 40

<210> 1222

<211> 39

<212> PRT

<213> Homo sapiens

<400> 1222

Met Met Gl<br/>n Val Pro Asp Leu Glu Leu Gly Leu Leu Leu Ala Thr Phe<br/> 1 5 10 15

Leu Leu His Leu Leu Asp Ala Leu Pro Met Leu Leu Ser Leu Gln Ser 20 25 30

Cys Arg Glu Pro Thr Ser Ser 35

<210> 1223

<211> 54

<212> PRT

<213> Homo sapiens

<400> 1223

Gly Thr Leu Gln Arg Gly Phe Leu Leu Cys Ser Leu Val Pro Gly Trp
1 5 10 15

Gly Trp Gly Thr Pro Ala Ala Leu Thr Asp Gly Ser Pro Phe Ser Leu 20 25 30

Ser Gly His Pro Ser Pro Thr Leu Thr Cys Thr Lys Phe Ser Pro Gln 35 40 45

Leu Leu Cys Val Ala Pro 50

<210> 1224

<211> 39

<212> PRT

<213> Homo sapiens

<400> 1224

Met Met Gln Val Pro Asp Leu Glu Leu Gly Leu Leu Leu Ala Thr Phe 1 5 10 15

Leu Leu His Leu Leu Asp Ala Leu Pro Met Leu Leu Ser Leu Gln Ser 20 25 30

Cys Arg Glu Pro Thr Ser Ser 35

<210> 1225

<211> 167

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (165)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1225

Met Ser Leu Tyr Leu Cys Val Ser Leu Leu Ile Ser Leu Ser Leu Ser 1 5 10 15

Leu Asn Val Ser Val Ser Val Ser Leu Arg Leu Cys Leu Tyr Phe Ser 20 25 30

Pro Pro Leu Ser Asp Ala Ile Ser Leu Cys Leu Ser Leu Ser Leu Ser 35 40 45

Val Ser Pro Phe Leu Ser Pro Ser Leu Ala Leu Cys Phe Leu Cys Leu 50 55 60

Cys Leu Phe Leu Ala Gln Ser Arg Ala Leu Gly Met Arg Thr Arg Val 65 70 75 80

Ser Gln Gly Trp Leu Gln Leu Asp Thr Ser Gly Ile Pro Ala Ser Pro 85 90 95

Gly Pro Ser Lys Gly Glu Arg Tyr Val Thr Phe Gly Val Val Gly Gly 100 105 110

Ala Gly Ser Asn Leu Ala Val His Ser Ala Arg Pro Leu Ile Gly Asn 115 120 125

Leu Leu Ser Val Gly Pro Thr Ser Thr Leu Thr Pro Thr Arg Gly Leu 130 135 140

Ser Trp Gln Ser Ile Ala Ala Ser Pro Ser Ser Thr Gly His Ala Lys 145 150 155 160

Phe Arg Glu Thr Xaa Lys Asn 165

<210> 1226

<211> 71

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1226

Gln Leu Arg Kaa Leu Arg Asp Ser Ile Pro Glu Gln Phe Cys Asn Arg 1 5 10 15

Leu Lys Ala Pro Gly Asn Arg Thr His Ile Ser Gly Cys Leu Gly Gly 20 25 30

Gly Gln Asp Leu Gly Gly Pro Glu Arg Val Phe Trp Asp Asp Gly Ile 35 40 45

Phe Cys Ile Leu Thr Val Trp Cys Leu His Arg Xaa Gln His Leu Ser 50 60

Glu Ile Asn Gly Leu Ser Leu 65 70

<210> 1227

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1227

Met Ser Leu Tyr Leu Cys Val Ser Leu Leu Ile Ser Leu Ser Leu Ser 1 10 . 15

Leu Asn Val Ser Val Ser Val Ser Leu Arg Leu Cys Leu Tyr Phe Ser 20 25 30

Pro Pro Leu Ser Asp Ala Ile Ser Leu Cys Leu Ser Leu Ser Leu Ser 35 40 45

Val Ser Pro Phe Leu Ser Pro Ser Leu Ala Leu Cys Phe Leu Cys Leu 50 55 60

Cys Leu Phe Leu Ala Gln Ser Arg Ala Leu Gly Met Arg Thr Arg Val

Ser Gln Gly Trp Leu Gln Leu Asp Thr Ser Gly Ile Pro Ala Ser Pro 85 90 95

Gly Pro Ser Lys Gly Glu Arg Tyr Val Tyr Phe Arg Gly Gly Arg Gly 100 105 110

Cys Gly

<sup>₹210&</sup>gt; 1228

<sup>&</sup>lt;211> 123

<sup>&</sup>lt;012> PRT

<sup>&</sup>lt;213 - Homo dapiens

- <220>
- <221> SITE
- <222> (5)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 1228
- Met Ala Ala Leu Xaa Thr Val Leu Phe Thr Gly Val Arg Arg Leu His 1 5 10 15
- Cys Ser Ala Ala Ala Trp Ala Gly Gly Gln Trp Arg Leu Gln Gly 20 25 30
- Leu Ala Ala Asn Pro Ser Gly Tyr Gly Pro Leu Thr Glu Leu Pro Asp 35 40 45
- Trp Ser Tyr Ala Asp Gly Arg Pro Ala Pro Pro Met Lys Gly Gln Leu 50 55 60
- Arg Arg Lys Ala Glu Arg Glu Thr Phe Ala Arg Arg Val Val Leu Leu 65 70 75 80
- Ser Gln Glu Met Asp Ala Gly Leu Gln Ala Trp Gln Leu Arg Gln Gln 85 90 95
- Lys Leu Gln Glu Glu Gln Arg Lys Gln Glu Asn Ala Leu Lys Pro Lys
  100 105 110
- Gly Ala Ser Leu Lys Ser Pro Leu Pro Ser Gln 115 120
- <210> 1229
- <211> 123
- <212> PRT
- <213> Homo sapiens
- <400> 1229
- Met Ala Ala Leu Val Thr Val Leu Phe Thr Gly Val Arg Arg Leu His 1 5 10 15
- Cys Ser Ala Ala Ala Trp Ala Gly Gly Gln Trp Arg Leu Gln Gly 20 25 30
- Leu Ala Ala Asn Pro Ser Gly Tyr Gly Pro Leu Thr Glu Leu Pro Asp 35 40 45
- Trp Ser Tyr Ala Asp Gly Arg Pro Ala Pro Pro Met Lys Gly Gln Leu 50 55 60
- Arg Arg Lys Ala Glu Arg Glu Thr Phe Ala Arg Arg Val Val Leu Leu 65 70 75 . 80
- Ser Gln Glu Met Asp Ala Gly Leu Gln Ala Trp Gln Leu Arg Gln Gln 85 90 95
- Lys Leu Gl<br/>n Glu Glu Gln Arg Lys Gln Glu As<br/>n Ala Leu Lys Pro Lys 100  $\phantom{000}$  105  $\phantom{000}$  110

Gly Ala Ser Leu Lys Ser Pro Leu Pro Ser Gln 115 120

<210> 1230

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1230

Met Gly Ser Ala Pro Trp Ala Pro Val Leu Leu Leu Ala Leu Gly Leu 1 5 10 15

Arg Gly Leu Gln Ala Gly Ala Arg Arg Ala Pro Asp Pro Gly Phe Gln 20 25 30

Glu Arg Phe Phe Gln Gln Arg Leu Asp His Phe Asn Phe Glu Arg Phe 35 40 45

Gly Asn Lys Thr Phe Pro Gln Arg Phe Leu Val Ser Asp Arg Phe Trp 50 60

Val Arg Gly Glu Gly Pro Ile Phe Phe Tyr Thr Gly Asn Glu Gly Asp 65 70 75 80

Val Trp Ala Phe Ala Asn Asn Ser Ala Phe Val Ala Glu Leu Ala Ala 85 90 95

Glu Arg Gly Ala Leu Leu Val Phe Ala Glu His Arg Tyr Tyr Gly Lys 100 105 110

Ser Leu Pro Phe Gly Ala Gln Ser Thr Gln Arg Gly Thr Arg Ser Cys 115 120 125

<210> 1231

<311> 492

<212> PRT

<213> Homo sapiens

<400> 1231

Met Gly Ser Ala Pro Trp Ala Pro Val Leu Leu Leu Ala Leu Gly Leu
1 5 10 15

Arg Gly Leu Gln Ala Gly Ala Arg Arg Ala Pro Asp Pro Gly Phe Gln 20 25 30

Glu Arg Phe Phe Gln Gln Arg Leu Asp His Phe Asn Phe Glu Arg Phe 40 45

Gly Asn Lys Thr Phe Pro Gln Arg Phe Leu Val Ser Asp Arg Phe Trp 50 55 60

Val Arg Sly Glu Gly Pro Ile Phe Phe Tyr Thr Gly Asn Glu Gly Asp 65 70 75 80

Val Trp Ala Phe Ala Asn Asn Ser Ala Phe Val Ala Glu Leu Ala Ala Glu Arg Gly Ala Leu Leu Val Phe Ala Glu His Arg Tyr Tyr Gly Lys 105 Ser Leu Pro Phe Gly Ala Gln Ser Thr Gln Arg Gly His Thr Glu Leu 120 Leu Thr Val Glu Gln Ala Leu Ala Asp Phe Ala Glu Leu Leu Arg Ala 135 Leu Arg Arg Asp Leu Gly Ala Gln Asp Ala Pro Ala Ile Ala Phe Gly 150 155 Gly Ser Tyr Gly Gly Met Leu Ser Ala Tyr Leu Arg Met Lys Tyr Pro His Leu Val Ala Gly Ala Leu Ala Ala Ser Ala Pro Val Leu Ala Val 185 Ala Gly Leu Gly Asp Ser Asn Gln Phe Phe Arg Asp Val Thr Ala Asp Phe Glu Gly Gln Ser Pro Lys Cys Thr Gln Gly Val Arg Glu Ala Phe 215 Arg Gln Ile Lys Asp Leu Phe Leu Gln Gly Ala Tyr Asp Thr Val Arg 230 235 225 Trp Glu Phe Gly Thr Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr Gln Leu Phe Met Phe Ala Arg Asn Ala Phe Thr Val Leu Ala Met Met Asp Tyr Pro Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asn Pro Val Lys Val Gly Cys Asp Arg Leu Leu Ser Glu Ala Gln Arg Ile Thr 295 . Gly Leu Arg Ala Leu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu 310 315 His Cys Tyr Asp Ile Tyr Arg Leu Tyr His Ser Cys Ala Asp Pro Thr 330 Gly Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys Thr Glu Ile Asn Leu Thr Phe Ala Ser Asn Asn Val Thr Asp Met Phe 360 Pro Asp Leu Pro Phe Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp 375 370 Thr Trp Gly Val Trp Pro Arg Pro Asp Trp Leu Leu Thr Ser Phe Trp 390 395

Gly Gly Asp Leu Arg Ala Ala Ser Asn Ile Ile Phe Ser Asn Gly Asn 405 416 415

- Leu Asp Pro Trp Ala Gly Gly Gly Ile Arg Arg Asn Leu Ser Ala Ser 420 425 430
- Val Ile Ala Val Thr Ile Gln Gly Gly Ala His His Leu Asp Leu Arg 435 440 445
- Ala Ser His Pro Glu Asp Pro Ala Ser Val Val Glu Ala Arg Lys Leu 450 455 460
- Glu Ala Thr Ile Ile Gly Glu Trp Val Lys Ala Ala Arg Arg Glu Gln 465 470 475 480
- Gln Pro Ala Leu Arg Gly Gly Pro Arg Leu Ser Leu 485 490

<210> 1232

<211> 492

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1232

- Met Gly Ser Ala Pro Trp Ala Pro Val Leu Leu Leu Ala Leu Gly Leu 1 5 10 15
- Arg Gly Leu Gln Ala Gly Ala Arg Arg.Ala Pro Asp Pro Gly Phe Gln 20 25 30
- Glu Arg Phe Phe Gln Gln Arg Leu Asp His Phe Asn Phe Glu Arg Phe 35 40 45
- Gly Asn Lys Thr Phe Pro Gln Arg Phe Leu Val Ser Asp Arg Phe Trp 50 55 60
- Val Arg Gly Glu Gly Pro Ile Phe Phe Tyr Thr Gly Asn Glu Gly Asp 65 70 75 80
- Val Trp Ala Phe Ala Asn Asn Ser Xaa Phe Val Ala Glu Leu Ala Ala 85 90 95
- Glu Arg Gly Ala Leu Leu Val Phe Ala Glu His Arg Tyr Tyr Gly Lys
  100 105 110
- Ser Leu Pro Phe Gly Ala Gln Ser Thr Gln Arg Gly His Thr Glu Leu 115 120 125
- Leu Thr Val Glu Gln Ala Leu Ala Asp Phe Ala Glu Leu Leu Arg Ala 130 135 140
- Leu Arg Arg Asp Leu Gly Ala Gln Asp Ala Pro Ala Ile Ala Phe Gly

| 145        |            |            |            |            | 150        |            |             |            |            | 155        |            |            |            |            | 160        |
|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Gly        | Ser        | Tyr        | Gly        | Gly<br>165 | Met        | Leu        | Ser         | Ala        | Tyr<br>170 | Leu        | Arg        | Met        | Lys        | Tyr<br>175 | Pro        |
| His        | Leu        | Val        | Ala<br>180 | Gly        | Ala        | Leu        | Ala         | Ala<br>185 | Ser        | Ala        | Pro        | Val        | Leu<br>190 | Ala        | Val        |
| Ala        | Gly        | Leu<br>195 | Gly        | Asp        | Ser        | Asn        | Gln·<br>200 | Phe        | Phe        | Arg        | Asp        | Val<br>205 | Thr        | Ala        | Asp        |
| Phe        | Glu<br>210 | Gly        | Gln        | Ser        | Pro        | Lys<br>215 | Cys         | Thr        | Gln        | Gly        | Val<br>220 | Arg        | Glu        | Ala        | Phe        |
| Arg<br>225 | Gln        | Île        | Lys        | Asp        | Leu<br>230 | Phe        | Leu         | Gln        | Gly        | Ala<br>235 | Tyr        | Asp        | Thr        | Val        | Arg<br>240 |
| Trp        | Glu        | Phe        | Gly        | Thr<br>245 | Cys        | Gln        | Pro         | Leu        | Ser<br>250 | Asp        | Glu        | Lys        | Asp        | Leu<br>255 | Thr        |
| Gln        | Leu        | Phe        | Met<br>260 | Phe        | Ala        | Arg        | Asn         | Ala<br>265 | Phe        | Thr        | Val        | Leu        | Ala<br>270 | Met        | Met        |
| Asp        | Tyr        | Pro<br>275 | Tyr        | Pro        | Thr        | Asp        | Phe<br>280  | Leu        | Gly        | Pro        | Leu        | Pro<br>285 | Ala        | Asn        | Pro        |
| Val        | Lys<br>290 | Val        | Gly        | CA2.       | Asp        | Arg<br>295 | Leu         | Leu        | Ser        | Glu        | Ala<br>300 | Gln        | Arg        | Ile        | Thr        |
| Gly<br>305 | Leu        | Arg        | Ala        | Leu        | Ala<br>310 | Gly        | Leu         | Va1        | Tyr        | Asn<br>315 | Ala        | Ser        | Gly        | Ser        | Glu<br>320 |
| His        | Суѕ        | Tyr        | Asp        | Ile<br>325 | Tyr        | Arg        | Leu         | Tyr        | His<br>330 | Ser        | Cys        | Ala        | Asp        | Pro<br>335 | Thr        |
| Gly        | Суѕ        | Gly        | Thr<br>340 | Gly        | Pro        | Asp        | Ala         | Arg<br>345 | Ala        | Trp        | Asp        | Tyr        | Gln<br>350 | Ala        | Суз        |
| Thr        |            | 11e<br>355 | Asn        | Leu        | Thr        | Phe        | Ala<br>360  | Ser        | Asn        | Asn        | Val        | Thr<br>365 | Asp        | Met        | Phe        |
| Pro        | Asp<br>370 | Leu        | Pro        | Phe        | Thr        | Asp<br>375 | Glu         | Leu        | Arg        | Gln        | Arg<br>380 |            | Cys        | Leu        | Asp        |
| Thr<br>385 | Trp        | Gly        | Val        | Trp        | Pro<br>390 | Arg        | Pro         | Asp        | Trp        | Leu<br>395 |            | Thr        | Ser        | Phe        | Trp<br>400 |
| Gly        | Gly        | Asp        | Leu        | Arg<br>405 |            | Ala        | Ser         | Asn        | Ile<br>410 |            | Phe        | Ser        | Asn        | Gly<br>415 | Asn        |
| Leu        | Asp        | Pro        | Trp<br>420 | Ala        | Gly        | Gly        | Gly         | Ile<br>425 |            | Arg        | Asn        | Leu        | Ser<br>430 | Ala        | Ser        |
| Val        | Ile        | Ala<br>435 |            | Thr        | Ile        | Gln        | Gly<br>440  |            | Ala        | His        | His        | Leu<br>445 | Asp        | Leu        | Arg        |
| Ala        | Ser<br>450 | His        | Pro        | Glu        | Asp        | Pro<br>455 |             | Ser        | Val        | Val        | Glu<br>460 |            | Arg        | Lys        | Leu        |
| Glu        | Ala        | Thr        | Tle        | Tle        | Glv        | Glu        | Tro         | Val        | Lvs        | Ala        | Δla        | Ara        | Ara        | Glu        | Glr        |

465 470 475 480

Gln Pro Ala Leu Arg Gly Gly Pro Arg Leu Ser Leu 485 490

<210> 1233

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1233

Met Phe Leu Glu Leu Ser Gln Ala Leu Leu Leu Leu Gly Leu Pro Arg 1 5 10 15

Ala Pro Thr Leu Phe Pro Ala Leu Pro Glu Gly Pro Thr Ser Leu Gly
20 25 30

Glu Gln Trp Pro Pro Gln Leu Pro Pro His Leu Gly Ala Pro Pro Ala 35 40 45

Ala Glu Gly Ala Val Ala Met Val Gly Cys Gly Glu Gly Arg Gly Gly 50 55 60

Lys Pro Leu Cys Cys Ser Pro Ala Gln Ser Pro Ala Gln Arg Val Arg 65 70 75 80

Ser Gly Gly Asp Lys Glu Pro Ile Thr Thr Thr Glu Val Ser Leu Ile 85 90 95

Leu Leu His Ser Arg Cys Phe Asn Leu Thr Lys Leu Lys Lys Thr Ala 100 105 110

Phe Ala Met Ala His Arg Ser Leu Tyr Leu Phe Leu Arg Lys Cys Phe 115 120 125

Leu Leu Phe Ala Gly Gln Val Pro Lys Asn Arg Gln Met Phe Leu Leu 130 135 140

Lys Asp Gln Pro Ile Arg Leu Val Arg Thr Arg Arg Leu Trp Pro Arg 145 150 155 160

Ala Ser Pro Leu Gln Ala Cys Gly Leu Arg Trp His Leu Ala Ala Gly 165 170 175

Pro Gln Pro Gly Glu Gly Tyr Tyr · 180

<210> 1234

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1234

Met Phe Leu Glu Leu Ser Gln Ala Leu Leu Leu Leu Gly Leu Pro Arg 1 5 10

Ala Pro Thr Leu Phe Pro Ala Leu Pro Glu Gly Pro Thr Ser Leu Gly 20 25 30

Glu Gln Trp Pro Pro Gln Leu Pro Pro His Leu Gly Ala Pro Pro Ala 35 40 45

Ala Glu Gly Ala Val Ala Met Val Gly Cys Gly Glu Gly Arg Gly Gly 50 55 60

Lys Pro Leu Cys Cys Ser Pro Ala Gln Ser Pro Ala Gln Arg Val Arg 65 70 75 80

Ser Gly Gly Asp Lys Glu Pro Ile Thr Thr Glu Val Ser Leu Ile 85 90 95

Leu Leu His Ser Arg Cys Phe Asn Leu Thr Lys Leu Lys Lys Thr Ala 100 105 110

Lys Lys 130

<210> 1235

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1235

Met Phe Leu Glu Leu Ser Gln Ala Leu Leu Leu Leu Gly Leu Pro Arg
1 5 10 15

Ala Pro Thr Leu Phe Pro Ala Leu Pro Glu Gly Pro Thr Ser Leu Gly 20 25 30

Glu Gln Trp Pro Pro Gln Leu Pro Pro His Leu Gly Ala Pro Pro Ala 35 40 45 .

Ala Glu Gly Ala Val Ala Met Val Gly Cys Gly Glu Gly Arg Gly Gly 50  $\phantom{0}$  55  $\phantom{0}$  60

Lys Pro Leu Cys Cys Ser Pro Ala Gln Ser Pro Ala Gln Arg Val Arg 65 70 75 80

Ser Gly Gly Asp Lys Glu Pro Ile Thr Thr Glu Val Ser Leu Ile 85 90 95

Leu Leu His Ser Arg Cys Phe Asn Leu Thr Lys Leu Lys Lys Thr Ala
100 105 110

Lys Lys Lys Lys 130

<210> 1235

<211> 399

<212> PRT

<213> Homo sapiens

<400> 1236

Met Gly Ile Leu Leu Gly Leu Leu Leu Gly His Leu Thr Val Asp 1 5 10

Thr Tyr Gly Arg Pro Ile Leu Glu Val Pro Glu Ser Val Thr Gly Pro 20 25 30

Trp Lys Gly Asp Val Asn Leu Pro Cys Thr Tyr Asp Pro Leu Gln Gly 35 40 45

Tyr Thr Gln Val Leu Val Lys Trp Leu Val Gln Arg Gly Ser Asp Pro 50 55 60

Val Thr Ile Phe Leu Arg Asp Ser Ser Gly Asp His Ile Gln Gln Ala 65 70 75 80

Ser Leu Gln Leu Ser Thr Leu Glu Met Asp Asp Arg Ser His Tyr Thr 100 105 110

Cys Glu Val Thr Trp Gln Thr Pro Asp Gly Asn Gln Val Val Arg Asp 115 120 125

Lys Ile Thr Glu Leu Arg Val Gln Lys Leu Ser Val Ser Lys Pro Thr 130 135 140

Val Thr Thr Gly Ser Gly Tyr Gly Phe Thr Val Pro Gln Gly Met Arg 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Ile Ser Leu Gln Cys Gln Ala Arg Gly Ser Pro Pro Ile Ser Tyr Ile 165 170 175

Trp Tyr Lys Gln Gln Thr Asn Asn Gln Glu Pro Ile Lys Val Ala Thr 180 185 190

Leu Ser Thr Leu Leu Phe Lys Pro Ala Val Ile Ala Asp Ser Gly Ser 195 200 205

Tyr Phe Cys Thr Ala Lys Gly Gln Val Gly Ser Glu Gln His Ser Asp 210 215 220

Ile Val Lys Phe Val Val Lys Asp Ser Ser Lys Leu Leu Lys Thr Lys 225 230 235 240

Thr Glu Ala Pro Thr Thr Met Thr Tyr Pro Leu Lys Ala Thr Ser Thr 245 250 255

Val Lys Gln Ser Trp Asp Trp Thr Thr Asp Met Asp Gly Tyr Leu Gly 260 265 270

Glu Thr Ser Ala Gly Pro Gly Lys Ser Leu Pro Val Phe Ala Ile Ile 275 280 285

Leu Ile Ile Ser Leu Cys Cys Met Val Val Phe Thr Met Ala Tyr Ile 290 295 300

Met Leu Cys Arg Lys Thr Ser Gln Gln Glu His Val Tyr Glu Ala Ala 305 310 315 320

Arg Ala His Ala Arg Glu Ala Asn Asp Ser Gly Glu Thr Met Arg Val\$325\$ 330 335

Ala Ile Phe Ala Ser Gly Cys Ser Ser Asp Glu Pro Thr Ser Gln Asn 340 345 350

Leu Gly Asn Asn Tyr Ser Asp Glu Pro Cys Ile Gly Gln Glu Tyr Gln 355 360 365

Ile Ile Ala Gl<br/>n Ile Asn Gly Asn Tyr Ala Arg Leu Leu Asp Thr Val<br/>  $370 \hspace{1.5cm} 375 \hspace{1.5cm} 380$ 

Pro Leu Asp Tyr Glu Phe Leu Ala Thr Glu Gly Lys Ser Val Cys 385 390 395

<210> 1237

<211> 399

<212> PRT

<213> Homo sapiens

<400> 1237

Met Gly Ile Leu Leu Gly Leu Leu Leu Gly His Leu Thr Val Asp 1 5 10 15

Thr Tyr Gly Arg Pro Ile Leu Glu Val Pro Glu Ser Val Thr Gly Pro 20 25 30

Trp Lys Gly Asp Val Asn Leu Pro Cys Thr Tyr Asp Pro Leu Gln Gly 35 40 45

Tyr Thr Gln Val Leu Val Lys Trp Leu Val Gln Arg Gly Ser Asp Pro 50 60

Val Thr Ile Phe Leu Arg Asp Ser Ser Gly Asp His Ile Gln Gln Ala 65 70 75 80

Lys Tyr Gln Gly Arg Leu His Val Ser His Lys Val Pro Gly Asp Val
85 90 95

Ser Leu Gln Leu Ser Thr Leu Glu Met Asp Asp Arg Ser His Tyr Thr 100 105 110

Cys Glu Val Thr Trp Gln Thr Pro Asp Gly Asn Gln Val Val Arg Asp 115 120 125

Lys Ile Thr Glu Leu Arg Val Gln Lys Leu Ser Val Ser Lys Pro Thr 130 135 140

Val Thr Thr Gly Ser Gly Tyr Gly Phe Thr Val Pro Gln Gly Met Arg
145 150 155 160

Ile Ser Leu Gln Cys Gln Ala Arg Gly Ser Pro Pro Ile Ser Tyr Ile 165 170 175

- Trp Tyr Lys Gln Gln Thr Asn Asn Gln Glu Pro Ile Lys Val Ala Thr 180 185 190
- Let: Ser Thr Leu Leu Phe Lys Pro Ala Val Ile Ala Asp Ser Gly Ser 195 200 205
- Tyr Phe Cys Thr Ala Lys Gly Gln Val Gly Ser Glu Gln His Ser Asp 210 215 220
- Ile Val Lys Phe Val Val Lys Asp Ser Ser Lys Leu Leu Lys Thr Lys 225 230 230 240
- Thr Glu Ala Pro Thr Thr Met Thr Tyr Pro Leu Lys Ala Thr Ser Thr 245 250 255
- Val Lys Gln Ser Trp Asp Trp Thr Thr Asp Met Asp Gly Tyr Leu Gly 260 265 270
- Glu Thr Ser Ala Gly Pro Gly Lys Ser Leu Pro Val Phe Ala Ile Ile 275 280 285
- Leu Ile Ile Ser Leu Cys Cys Met Val Val Phe Thr Met Ala Tyr Ile 290 295 300
- Met Leu Cys Arg Lys Thr Ser Gln Gln Glu His Val Tyr Glu Ala Ala 305 \$310\$ 315 320
- Arg Ala His Ala Arg Glu Ala Asn Asp Ser Gly Glu Thr Met Arg Val\$325\$ 330 335
- Ala Ile Phe Ala Ser Gly Cys Ser Ser Asp Glu Pro Thr Ser Gln Asn 340 345 350
- Leu Gly Asn Asn Tyr Ser Asp Glu Pro Cys Ile Gly Gln Glu Tyr Gln 355 360 365
- Ile Ile Ala Gln Ile Asn Gly Asn Tyr Ala Arg Leu Leu Asp Thr Val 370 380
- Pro Leu Asp Tyr Glu Phe Leu Ala Thr Glu Gly Lys Ser Val Cys 385 390 395

<sup>&</sup>lt;?10> 1238

<sup>&</sup>lt;211> 209

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;220>

<sup>&</sup>lt;221> SITE

<sup>&</sup>lt;222> (15)

<sup>&</sup>lt;223> Xaa equals any of the naturally occurring L-amino acids

<sup>&</sup>lt;320>

<sup>&</sup>lt;221> SITE

<sup>&</sup>lt;222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (128)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (147)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (152).

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1238

Met Ala Lys Phe Arg Arg Thr Cys Ile Ile Leu Ala Leu Xaa Ile 1 5 10 15

Leu Xaa Ile Phe Ser Leu Met Met Gly Leu Lys Met Leu Arg Pro Asn 20 25 30

Thr Ala Thr Phe Gly Ala Pro Phe Gly Leu Asp Leu Leu Pro Glu Leu 35 40 45

His Gln Arg Thr Ile His Leu Gly Lys Asn Phe Asp Phe Gln Lys Ser 50 55 60

Asp Arg Ile Asn Ser Glu Thr Asn Thr Lys Asn Leu Lys Ser Val Glu 65 70 75 80

Ile Thr Met Lys Pro Ser Lys Ala Ser Glu Leu Asn Leu Asp Glu Leu 85 90 95

Pro Pro Leu Asn Asn Tyr Leu His Val Phe Tyr Tyr Ser Trp Tyr Gly
100 105 110

Asn Pro Gln Phe Asp Gly Lys Tyr Ile His Trp Asn His Pro Val Xaa 115 120 125

Glu His Trp Asp Pro Arg Ile Ala Lys Asn Tyr Pro Gln Gly Arg His 130 140

Asn Pro Xaa Asp Asp Ile Gly Xaa Ser Phe Tyr Pro Glu Leu Gly Ser 145 150 155 160

Tyr Ser Ser Arg Asp Pro Ser Val Ile Glu Thr His Met Arg Gln Met 165 170 175

Arg Ser Ala Ser Ile Gly Asn Tyr Cys Ile Tyr Ile Tyr Met Cys Val 180 185 190

Phe Val Ser Val Tyr Met His Ile Asn Asp Phe Leu Cys Asn Phe Asn 195 200 205

Ser

<210> 1239

<211> 81

<212> PRT

<213> Homo sapiens

<400> 1239

Tyr Phe Asp Ile Ser Lys His Leu His Gly Asn His Tyr Ile Asp Pro 1 5 10 15

Thr Cys Gly Phe Ser Ser Tyr Val His Leu Thr Arg Ile Tyr Tyr Phe 20 25 30

Arg Tyr Asn Leu Gln Met Ser His Leu Ile Ile Phe Tyr Asn Ile Pro 35 40 45

Tyr Phe Ile Lys Val Leu Leu Glu Lys Tyr Leu Pro Gln Arg Ser Phe 50 55 60

Cys His Cys Val Arg Cys Val Phe Glu Pro Thr Met Thr Glu Ser Lys 65 70 75 80

Phe

<210> 1240

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1240

Met Ala Lys Phe Arg Arg Arg Thr Cys Ile Ile Leu Ala Leu Phe Ile 1 5 10

Leu Phe Ile Phe Ser Leu Met Met Gly Leu Lys Met Leu Arg Pro Asn 20 25 30

Thr Ala Thr Phe Gly Ala Pro Phe Gly Leu Asp Leu Leu Pro Glu Leu 35 40 45

His Gln Arg Thr Ile His Leu Gly Lys Asn Phe Asp Phe Gln Lys Ser 50 55 60

Asp Arg Ile Asn Ser Glu Thr Asn Thr Lys Asn Leu Lys Ser Val Glu 65 70 75 80

Ile Thr Met Lys Pro Ser Lys Ala Ser Glu Leu Asn Leu Asp Glu Leu 85 90 95

Pro Pro Leu Asn Asn Tyr Leu His Val Phe Tyr Tyr Ser Trp Tyr Gly
100 105 110

Asn Pro Gln Phe Asp Gly Lys Tyr Ile His Trp Asn His Pro Val Leu 115 120 125

Glu Hiz Trp Asp Pro 130

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<210> 1241
<211> 886
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (234)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (275)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (871)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1241
Met Ala Ala Arg Gly Arg Gly Leu Leu Leu Thr Leu Ser Val Leu
Leu Ala Ala Gly Pro Ser Ala Ala Ala Xaa Lys Leu Asn Ile Pro Lys
Val Leu Leu Pro Phe Thr Arg Ala Thr Arg Val Asn Phe Thr Leu Glu
Ala Ser Glu Gly Cys Tyr Arg Trp Leu Ser Thr Arg Pro Glu Val Ala
Ser Ile Glu Pro Leu Gly Leu Asp Glu Gln Gln Cys Ser Gln Lys Ala
                   70
Val Val Gln Ala Arg Leu Thr Gln Pro Ala Arg Leu Thr Ser Ile Ile
Phe Ala Glu Asp Ile Thr Thr Gly Gln Val Leu Arg Cys Asp Ala Ile
                                105
Val Asp Leu Ile His Asp Ile Gln Ile Val Ser Thr Thr Arg Glu Leu
        115
Tyr Leu Glu Asp Ser Pro Leu Glu Leu Lys Ile Gln Ala Leu Asp Ser
                        135
                                           140
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| Glu<br>145 | Gly        | Asn        | Thr        | Phe        | Ser<br>150 | Thr        | Leu        | Ala        | Gly        | 155        | Val        | Phe        | Glu        | Trp        | Thr<br>160 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ile        | Val        | Lys        | Asp        | Ser<br>165 | Glu        | Ala        | Asp        | Arg        | Phe<br>170 | Ser        | Asp        | Ser        | His        | Asn<br>175 | Ala        |
| Leu        | Arg        | Ile        | Leu<br>180 | Thr        | Phe        | Leu        | Glu        | Ser<br>185 | Thr        | Tyr        | Ile        | Pro        | Pro<br>190 | Ser        | Tyr        |
| Ile        | Ser        | Glu<br>195 | Met        | Glu        | Lys        | Ala        | Ala<br>200 | Lys        | Gln        | Gly        | Asp        | Thr<br>205 | Ile        | Leu        | Val        |
| Ser        | Gly<br>210 | Met        | Lys        | Thr        | Gly        | Ser<br>215 | Xaa        | Lys        | Leu        | Lys        | Ala<br>220 | Arg        | Ile        | Gln        | Glu        |
| Ala<br>225 | Val        | Tyr        | Lys        | Asn        | Val<br>230 | Arg        | Pro        | Ala        | Xaa        | Val<br>235 | Arg        | Leu        | Leu        | Ile        | Leu<br>240 |
| Glu        | Asn        | Ile        | Leu        | Leu<br>245 | Asn        | Pro        | Ala        | Tyr        | Asp<br>250 | Val        | Tyr        | Leu        | Met        | Val<br>255 | Gly        |
| Thr        | Ser        | Ile        | His<br>260 | Tyr        | Lys        | Val        | Gln        | Lys<br>265 | Ile        | Arg        | Gln        | Gly        | Lys<br>270 | Ile        | Thr        |
| Glu        | Leu        | Xaa<br>275 | Met        | Pro        | Ser        | Asp        | Gln<br>280 | Tyr        | Glu        | Leu        | Gln        | Leu<br>285 | Gln        | Asn        | Ser        |
| Ile        | Pro<br>290 | Gly        | Pro        | Glu        | Gly        | Asp<br>295 | Pro        | Thr        | Arg        | Pro        | Val<br>300 | Ala        | Val        | Leu        | Ala        |
| Gln<br>305 | Asp        | Thr        | Ser        | Met        | Val<br>310 | Thr        | Ala        | Leu        | Gln        | Leu<br>315 | Gly        | Gln        | Ser        | Ser        | Leu<br>320 |
| Val        | Leu        | Gly        | His        | Arg<br>325 | Ser        | Ile        | Arg        | Met        | Gln<br>330 | Gly        | Ala        | Ser        | Arg        | Leu<br>335 | Pro        |
| Asn        | Ser        | Thr        | Ile<br>340 | Tyr        | Val        | Val        | Glu        | Pro<br>345 | Gly        | Tyr        | Leu        | Gly        | Phe<br>350 | Thr        | Val        |
| His        | Pro        | Gly<br>355 | Asp        | Arg        | Trp        | Val        | Leu<br>360 | Glu        | Thr        | Gly        | Arg        | Leu<br>365 | Tyr        | Glu        | Ile        |
| Thr        | Ile<br>370 | Glu        | Val        | Phe        | Asp        | Lys<br>375 | Phe        | Ser        | Asn        | Lys        | Val<br>380 | Tyr        | Val        | Ser        | Asp        |
| Asn<br>385 | Ile        | Arg        | Ile        | Glu        | Thr<br>390 | Val        | Leu        | Pro        | Ala        | Glu<br>395 | Phe        | Phe        | Glu        | Val        | Leu<br>400 |
| Ser        | Ser        | Ser        | Gln        | Asn<br>405 | Gly        | Ser        | Tyr        | His        | Arg<br>410 | Ile        | Arg        | Ala        | Leu        | Lys<br>415 | Arg        |
| Gly        | Gln        | Thr        | Ala<br>420 | Ile        | Asp        | Ala        | Ala        | Leu<br>425 | Thr        | Ser        | Val        | Val        | Asp<br>430 | Gln        | Asp        |
| Gly        | Gly        | Val<br>435 | His        | Ile        | Leu        | Gln        | Val<br>440 | Pro        | Val        | Trp        | Asn        | Gln<br>445 | Gln        | Glu        | Val        |
| Glu        | Ile<br>450 | His        | Ile        | Pro        | Ile        | Thr<br>455 | Leu        | Tyr        | Pro        | Ser        | Ile<br>460 | Leu        | Thr        | Phe        | Pro        |

|   | rp<br>165  | Gln        | Pro        | Lys        | Thr        | Gly<br>470 | Ala        | Tyr        | Gln        | Tyr        | Thr<br>475 | Ile        | Arg        | Ala        | His        | Gly<br>480 |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| ( | Gly        | Ser        | Gly        | Asn        | Phe<br>485 | Ser        | Trp        | Ser        | Ser        | Ser<br>490 | Ser        | His        | Leu        | Val        | Ala<br>495 | Thr        |
| ٦ | Val        | Thr        | Val        | Lys<br>500 | Gly        | Val        | Met        | Thr        | Thr<br>505 | Gly        | Ser        | Asp        | Ile        | Gly<br>510 | Phe        | Ser        |
| • | Val        | Ile        | Gln<br>515 | Ala        | His        | Asp        | Val        | Gln<br>520 | Asn        | Pro        | Leu        | His        | Phe<br>525 | Gly        | Glu        | Met        |
|   | Lys        | Val<br>530 | Tyr        | Val        | Ile        | Glu        | Pro<br>535 | His        | Ser        | Met        | Glu        | Phe<br>540 | Ala        | Pro        | Cys        | Gln        |
|   | Val<br>545 | Glu        | Ala        | Arg        | Val        | Gly<br>550 | Gln        | Ala        | Leu        | Glu        | Leu<br>555 | Pro        | Leu        | Arg        | Ile        | Ser<br>560 |
|   | Gly        | Leu        | Met        | Pro        | Gly<br>565 | Gly        | Ala        | Ser        | Glu        | Val<br>570 | Val        | Thr        | Leu        | Ser        | Asp<br>575 | Cys        |
|   | Ser        | His        | Phe        | Asp<br>580 | Leu        | Ala        | Val        | Glu        | Val<br>585 | Glu        | Asn        | Gln        | Gly        | Val<br>590 | Phe        | Gln        |
|   | Pro        | Leu        | Pro<br>595 | Gly        | Arg        | Leu        | Pro        | Pro<br>600 | Gly        | Ser        | Glu        | His        | Суs<br>605 | Ser        | Gly        | Val        |
|   | Arg        | Val<br>610 | Lys        | Ala        | Glu        | Ala        | Gln<br>615 | Gly        | Ser        | Thr        | Thr        | Leu<br>620 | Leu        | Val        | Ser        | Tyr        |
|   | Arg<br>625 | His        | Gly        | His        | Val        | His<br>630 | Leu        | Ser        | Ala        | Lys        | Ile<br>635 | Thr        | Ile        | Ala        | Ala        | Tyr<br>640 |
|   | Leu        | Pro        | Leu        | Lys        | Ala<br>645 | Val        | Asp        | Pro        | Ser        | Ser<br>650 | Val        | Ala        | Leu        | Val        | Thr<br>655 | Leu        |
|   | Gly        | Ser        | Ser        | Lys<br>660 | Glu        | Met        | Leu        | Phe        | Glu<br>665 | Gly        | Gly        | Pro        | Arg        | Pro<br>670 | Trp        | Ile        |
|   | Leu        | Glu        | Pro<br>675 | Ser        | Lys        | Phe        | Phe        | Gln<br>680 | Asn        | Val        | Thr        | Ala        | Glu<br>685 | Asp        | Thr        | Asp        |
|   | Ser        | Ile<br>690 | Gly        | Leu        | Ala        | Leu        | Phe<br>695 | Ala        | Pro        | His        | Ser        | Ser<br>700 | Arg        | Asn        | Tyr        | Gln        |
|   | 705        |            | -          | Ile        |            | 710        |            |            |            |            | 715        |            |            |            |            | 720        |
|   | Ala        | Leu        | Ser        | Val        | Gly<br>725 |            | Lys        | Pro        | Ser        | Leu<br>730 |            | Asn        | Pro        | Phe        | Pro<br>735 |            |
|   | Val        | Glu        | Pro        | Ala<br>740 | Val        | Va1        | Lys        | Phe        | Val<br>745 |            | Ala        | Pro        | Pro        | Ser<br>750 | Arg        | Leu        |
|   | Thr        | Leu        | Val<br>755 | Pro        | Val        | Tyr        | Thr        | Ser<br>760 | Pro        | Gln        | Leu        | Asp        | Met<br>765 | Ser        | Cys        | Pro        |
|   | Leu        | Leu<br>770 | Gln        | Gln        | Asn        | Lys        | Gln<br>775 |            | Va1        | Pro        | Val        | Ser<br>780 |            | His        | Arg        | Asn        |

Pro Leu Leu Asp Leu Ala Ala Tyr Asp Gln Glu Gly Arg Arg Phe Asp 785 790 795 800

Asn Phe Ser Ser Leu Ser Ile Gln Trp Glu Ser Thr Arg Pro Val Leu 805 810 815

Ala Ser Ile Glu Pro Glu Leu Pro Met Gln Leu Val Ser Gln Asp Asp 820 825 830

Glu Ser Gly Gln Lys Lys Leu His Gly Leu Gln Ala Ile Leu Val His 835 \$840 \$945

Glu Ala Ser Gly Thr Thr Ala Ser Leu Pro Leu Pro Leu Ala Thr Arg 850 855 860

Ser Pro Thr Ser Ala Leu Xaa Glu Gln Ser Ser Arg Met Thr Leu Trp 865 870 875 880

Cys Leu Cys Arg Pro Pro 885

<210> 1242

<211> 831

<212> PRT

<213> Homo sapiens

<400> 1242

Met Ala Ala Arg Gly Arg Gly Leu Leu Leu Leu Thr Leu Ser Val Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Ala Ala Gly Pro Ser Ala Ala Ala Ala Lys Leu Asn Ile Pro Lys 20 25 30

Val Leu Leu Pro Phe Thr Arg Ala Thr Arg Val Asn Phe Thr Leu Glu 35 40 45

Ala Ser Glu Gly Cys Tyr Arg Trp Leu Ser Thr Arg Pro Glu Val Ala 50 55 60

Ser Ile Glu Pro Leu Gly Leu Asp Glu Gln Gln Cys Ser Gln Lys Ala 65 70 75 80

Val Val Gln Ala Arg Leu Thr Gln Pro Ala Arg Leu Thr Ser Ile Ile 85 90 95

Phe Ala Glu Asp Ile Thr Thr Gly Gln Val Leu Arg Cys Asp Ala Ile 100 105 110

Val Asp Leu Ile His Asp Ile Gln Ile Val Ser Thr Thr Arg Glu Leu 115 120 125

Tyr Leu Glu Asp Ser Pro Leu Glu Leu Lys Ile Gln Ala Leu Asp Ser 130 135 140

Glu Gly Asn Thr Phe Ser Thr Leu Ala Gly Leu Val Phe Glu Trp Thr 145 150 155 160

Ile Val Lys Asp Ser Glu Ala Asp Arg Phe Ser Asp Ser His Asn Ala 165 170 Leu Arg Ile Leu Thr Phe Leu Glu Ser Thr Tyr Ile Pro Pro Ser Tyr Ile Ser Glu Met Glu Lys Ala Ala Lys Gln Gly Asp Thr Ile Leu Val Ser Gly Met Lys Thr Gly Ser Ser Lys Leu Lys Ala Arg Ile Gln Glu 215 Ala Val Tyr Lys Asn Val Arg Pro Ala Glu Val Arg Leu Leu Ile Leu Glu Asn Ile Leu Leu Asn Pro Ala Tyr Asp Val Tyr Leu Met Val Gly 245 250 Thr Ser Ile His Tyr Lys Val Gln Lys Ile Arg Gln Gly Lys Ile Thr Glu Leu Ser Met Pro Ser Asp Gln Tyr Glu Leu Gln Leu Gln Asn Ser 280 Ile Pro Gly Pro Glu Gly Asp Pro Thr Arg Pro Val Ala Val Leu Ala 295 Gln Asp Thr Ser Met Val Thr Ala Leu Gln Leu Gly Gln Ser Ser Leu 310 315 Val Leu Gly His Arg Ser Ile Arg Met Gln Gly Ala Ser Arg Leu Pro Asn Ser Thr Ile Tyr Val Val Glu Pro Gly Tyr Leu Gly Phe Thr Val His Pro Gly Asp Arg Trp Val Leu Glu Thr Gly Arg Leu Tyr Glu Ile 360 Thr Ile Glu Val Phe Asp Lys Phe Ser Asn Lys Val Tyr Val Ser Asp Asn Ile Arg Ile Glu Thr Val Leu Pro Ala Glu Phe Phe Glu Val Leu 385 390 395 Ser Ser Ser Gln Asn Gly Ser Tyr His Arg Ile Arg Ala Leu Lys Arg Gly Gln Thr Ala Ile Asp Ala Ala Leu, Thr Ser Val Val Asp Gln Asp Gly Gly Val His Ile Leu Gln Val Pro Val Trp Asn Gln Glu Val 440 Glu Ile His Ile Pro Ile Thr Leu Tyr Pro Ser Ile Leu Thr Phe Pro 455 Trp Gln Pro Lys Thr Gly Ala Tyr Gln Tyr Thr Ile Arg Ala His Gly 470

Gly Ser Gly Asn Phe Ser Trp Ser Ser Ser Ser His Leu Val Ala Thr 49C Val Thr Val Lys Gly Val Met Thr Thr Gly Ser Asp Ile Gly Phe Ser 500 505 Val Ile Gln Ala His Asp Val Gln Asn Pro Leu His Phe Gly Glu Met 520 Lys Val Tyr Val Ile Glu Pro His Ser Met Glu Phe Ala Pro Cys Gln 535 Val Glu Ala Arg Val Gly Gln Ala Leu Glu Leu Pro Leu Arg Ile Ser Gly Leu Met Pro Gly Gly Ala Ser Glu Val Val Thr Leu Ser Asp Cys 570 Ser His Phe Asp Leu Ala Val Glu Val Glu Asn Gln Gly Val Phe Gln 585 580 Pro Leu Pro Gly Arg Leu Pro Pro Gly Ser Glu His Cys Ser Gly Val 600 Arg Val Lys Ala Glu Ala Gln Gly Ser Thr Thr Leu Leu Val Ser Tyr 615 Arg His Gly His Val His Leu Ser Ala Lys Ile Thr Ile Ala Ala Tyr 630 635 Leu Pro Leu Lys Ala Val Asp Pro Ser Ser Val Ala Leu Val Thr Leu 650 Gly Ser Ser Lys Glu Met Leu Phe Glu Gly Gly Pro Arg Pro Trp Ile 665 Leu Glu Pro Ser Lys Phe Phe Gln Asn Val Thr Ala Glu Asp Thr Asp 680 Ser Ile Gly Leu Ala Leu Phe Ala Pro His Ser Ser Arg Asn Tyr Gln 695 Gln His Trp Ile Leu Val Thr Cys Gln Ala Leu Gly Glu Gln Val Ile 710 Ala Leu Ser Val Gly Asn Lys Pro Ser Leu Thr Asn Pro Phe Pro Ala 730 Val Glu Pro Ala Val Val Lys Phe Val Cys Ala Pro Pro Ser Arg Leu 740 Thr Leu Val Pro Val Tyr Thr Ser Pro Gln Leu Asp Met Ser Cys Pro 760 Leu Leu Gln Gln Asn Lys Gln Val Val Pro Val Ser Ser His Arg Asn 775 730 Pro Leu Leu Asp Leu Ala Ala Tyr Asp Gln Glu Gly Arg Arg Phe Asp 790 795

Asn Phe Ser Ser Leu Ser Ile Gln Trp Glu Ser Thr Arg Pro Val Leu 805 810 815

Ala Ala Ser Ser Leu Ser Cys His Ala Ala Gly Val Pro Gly Arg 820 825 830

<210> 1243

<211> 89

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (65)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1243

Met Pro Val Pro Leu Leu Ala Ser Ala Ala Trp Cys His Leu Cys Ala 1 5 10 15

Gly Ala Leu Pro Ala Trp Leu Trp Leu Pro Gly Gly Gln Leu Leu His 20 25 30

Asn Gly Thr Cys Val Pro Xaa Thr Ala Cys Pro Cys Thr Gln His Ser 35 40 45

Leu Pro Trp Gly Leu Thr Leu Thr Leu Glu Glu Gln Ala Gln Glu Leu 50 55 60

Xaa Pro Gly Thr Val Leu Thr Arg Asn Cys Thr Pro Leu Cys Leu Pro 65 70 75 80

Leu Trp Ser Leu Gln Leu Leu Pro Arg

<210> 1244

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1244

Leu Arg Ser His Cys Val Ala Asp Glu Gly Glu Thr Glu Val Glu Gly 20 25 30

Thr Arg Ala Thr Trp Val Glu His Ser Gly Arg Pro Gly Val Gly Ser 35 40 45

Gly Arg Pro Pro Gly Thr Ser Leu Thr Thr Leu Pro Leu Leu Thr

50 55 60

His Leu Ser Leu Thr Cys Pro Leu Gly Gly Asp Phe Ser Lys Arg
65 70 75

<210> 1245

<211> 89

<212> PPT

<213> Homo sapiens

<400> 1245

Met Pro Val Pro Leu Leu Ala Ser Ala Ala Trp Cys His Leu Cys Ala 1 5 10 15

Gly Ala Leu Pro Ala Trp Leu Trp Leu Pro Trp Arg Ala Ala Ala Ala 20 25 30

Gln Trp His Val Cys Ala Ser His Cys Leu Pro Leu His Pro Ala Phe 35 40 45

Ser Ala Leu Gly Pro His Pro Asp Pro Gly Arg Ala Gly Pro Gly Ala 50 55 60

Ala Pro Arg Asp Cys Ala His Pro Glu Leu His Pro Leu Cys Leu Pro 65 70 75 80

Arg Trp Ser Leu Gln Leu Leu Pro Arg

<210> 1246

<211> 334

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (124)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (129)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (214)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (224)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1246

Met Asp Gln Ala Leu Ser Leu Trp Phe Leu Leu Gly Trp Ile Gly Gly

| 1          |            |            |            | 5          |            |            |            |            | 10         |            |            |            |            | 15         |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asp        | Ser        | Суѕ        | Asn<br>20  | Leu        | Ile        | Gly        | Ser        | Phe<br>25  | Leu        | Ala        | Asp        | Gln        | Leu<br>30  | Pro        | Leu        |
| G1n        | Thr        | Tyr<br>35  | Thr        | Ala        | Val        | Tyr        | Tyr<br>40  | Val        | Leu        | Ala        | Asp        | Leu<br>45  | Val        | Met        | Leu        |
| Thr        | Leu<br>50  | Tyr        | Phe        | Tyr        | Tyr        | Lys<br>55  | Phe        | Arg        | Thr        | Arg        | Pro<br>60  | Ser        | Leu        | Leu        | Ser        |
| Ala<br>65  | Pro        | Ile        | Asn        | Ser        | Val<br>70  | Leu        | Leu        | Phe        | Leu        | Met<br>75  | Gly        | Met        | Ala        | Суѕ        | Ala<br>80  |
| Thr        | Pro        | Leu        | Leu        | Ser<br>85  | Ala        | Ala        | Gly        | Pro        | Val<br>90  | Ala        | Ala        | Pro        | Arg        | Glu<br>95  | Ala        |
| Phe        | Arg        | Gly        | Arg<br>100 | Ala        | Leu        | Leu        | Ser        | Val<br>105 | Glu        | Ser        | Gly        | Ser        | Lys<br>110 | Pro        | Phe        |
| Thr        | Arg        | Gln<br>115 | Glu        | Val        | Ile        | Gly        | Phe<br>120 | Val        | Ile        | Gly        | Xaa        | Ile<br>125 | Ser        | Ser        | Val        |
| Xaa        | Tyr<br>130 | Leu        | Leu        | Ser        | Arg        | Leu<br>135 | Pro        | Gln        | Ile        | Arg        | Thr<br>140 | Asn        | Phe        | Leu        | Arg        |
| Lys<br>145 | Ser        | Thr        | Gln        | Gly        | Ile<br>150 | Ser        | Tyr        | Ser        | Leu        | Phe<br>155 | Ala        | Leu        | Val        | Met        | Leu<br>160 |
| Gly        | Asn        | Thr        | Leu        | Tyr<br>165 | Gly        | Leu        | Ser        | Val        | Leu<br>170 | Leu        | Lys        | Asn        | Pro        | Glu<br>175 | Glu        |
| Gly        | Gln        | Ser        | Glu<br>180 | Gly        | Ser        | Tyr        | Leu        | Leu<br>185 | His        | His        | Leu        | Pro        | Trp<br>190 | Leu        | Val        |
| Gly        | Ser        | Leu<br>195 | Gly        | Val        | Leu        | Leu        | Leu<br>200 | Asp        | Thr        | Ile        | Ile        | Ser<br>205 | Ile        | Gln        | Phe        |
| Leu        | Val<br>210 | Tyr        | Arg        | Arg        | Xaa        | Pro<br>215 | Pro        | Pro        | Arg        | Ser        | Leu<br>220 | Ser        | Pro        | Ser        | Xaa        |
| Pro<br>225 | Ala        | Asp        | Gln        | Asn        | Gln<br>230 |            | Glu        | Arg        | Arg        | Arg<br>235 |            | Gly        | Thr        | Thr        | Gly<br>240 |
| Cys        | His        | Thr        | Arg        | Gln<br>245 | Glu        | Glu        | Val        | Trp        | Thr<br>250 | Val        | Met        | Va1        | Arg        | Arg<br>255 | Pro        |
| Суѕ        | Ile        | Ser        | Leu<br>260 | Arg        | Val        | Ala        | Ser        | Gly<br>265 | Ser        | Ser        | Val        | Asp        | Arg<br>270 | Thr        | Val        |
| Pro        | Pro        | Gly<br>275 | Thr        | His        | Leu        | Gln        | Val<br>280 | Asp        | Pro        | Glu        | Ala        | Ser<br>285 | Arg        | Pro        | Gly        |
| Leu        | Glu<br>290 | Arg        | Arg        | Pro        | Gln        | Gly<br>295 | Leu        | Ser        | Gly        | Aşp        | Ser<br>300 |            | Ala        | Ala        | Pro        |
| Pro<br>305 | Thr        | Thr        | ,Tyr       | Leu        | 11e<br>310 |            | Pro        | Thr        | Gln        | Asp<br>315 |            | Pro        | Val        | Asn        | Ser<br>320 |
| Arg        | Gln        | Leu        | Asn        | Lys        | Gln        | Ala        | Gly        | Tyr        | Ser        | Gly        | Ser        | His        | Leu        |            |            |

325 330

<210> 1247

<211> 226

<212> PRT <213> Homo sapiens

<400> 1247

Met Asp Gln Ala Leu Ser Leu Trp Phe Leu Leu Gly Trp Ile Gly Gly
1 5 10 15

Asp Ser Cys Asn Leu Ile Gly Ser Phe Leu Ala Asp Gln Leu Pro Leu 20 25 30

Gln Thr Tyr Thr Ala Val Tyr Tyr Val Leu Ala Asp Leu Val Met Leu 35 40 45

Thr Leu Tyr Phe Tyr Tyr Lys Phe Arg Thr Arg Pro Ser Leu Leu Ser 50 55 60

Ala Pro Ile Asn Ser Val Leu Leu Phe Leu Met Gly Met Ala Cys Ala 65 70 75 80

Thr Pro Leu Ser Ala Ala Gly Pro Val Ala Ala Pro Arg Glu Ala 85 90 95

Phe Arg Gly Arg Ala Leu Leu Ser Val Glu Ser Gly Ser Lys Pro Phe 100 105 110

Thr Arg Gln Glu Val Ile Gly Phe Val Ile Gly Ser Ile Ser Ser Val 115 120 125

Leu Tyr Leu Leu Ser Arg Leu Pro Gln Ile Arg Thr Asn Phe Leu Arg 130 135 140

Lys Ser Thr Gln Gly Ile Ser Tyr Ser Leu Phe Ala Leu Val Met Leu 145 150 160

Gly Asn Thr Leu Tyr Gly Leu Ser Val Leu Leu Lys Asn Pro Glu Glu 165 170 175

Gly Gln Ser Glu Gly Ser Tyr Leu Leu His His Leu Pro Trp Leu Val

Gly Ser Leu Gly Val Leu Leu Leu Asp Thr Ile Ile Ser Ile Gln Phe 195 200 205

Leu Val Tyr Arg Arg Ser Thr Ala Ala Ser Glu Leu Glu Pro Leu Leu 210 215 220

Pro Ser 225

<210> 1248

<211> 184

<212> FRT

<213> Homo sapiens

<400> 1248

Met Lys Ile Leu Val Ala Phe Leu Val Val Leu Thr Ile Phe Gly Ile 1 5 10 15

Gln Ser His Gly Tyr Glu Val Phe Asn Ile Ile Ser Pro Ser Asn Asn 20 25 30

Gly Gly Asn Val Gln Glu Thr Val Thr Ile Asp Asn Glu Lys Asn Thr 35 40 45

Ala Ile Ile Asn Ile His Ala Gly Ser Cys Ser Ser Thr Thr Ile Phe 50 60

Asp Tyr Lys His Gly Tyr Ile Ala Ser Arg Val Leu Ser Arg Arg Ala 65 70 75 80

Cys Phe Ile Leu Lys Met Asp His Gln Asn Ile Pro Pro Leu Asn Asn 85 90 95

Leu Gln Trp Tyr Ile Tyr Glu Lys Gln Ala Leu Asp Asn Met Phe Ser 100 105 110

Ser Lys Tyr Thr Trp Val Lys Tyr Asn Pro Leu Glu Ser Leu Ile Lys 115 120 125

Asp Val Asp Trp Phe Leu Leu Gly Ser Pro Ile Glu Lys Leu Cys Lys 130 135 140

His Ile Pro Leu Tyr Lys Gly Glu Val Val Glu Asn Thr His Asn Val 145 150 155 160

Gly Ala Gly Gly Cys Ala Lys Ala Gly Leu Leu Gly Ile Leu Gly Ile 165 170 175

Ser Ile Cys Ala Asp Ile His Val

<210> 1249

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1249

Met Lys Ile Leu Val Ala Phe Leu Val Val Leu Thr Ile Phe Gly Ile 1 5 10 15

Gln Ser His Gly Tyr Glu Val Phe Asn Ile Ile Ser Pro Ser Asn Asn 20 25 30

Gly Asn Val Gln Glu Thr Val Thr Ile Asp Asn Glu Lys Asn Thr 35 40 45

Ala Ile Ile Asn Ile His Ala Gly Ser Cys Ser Ser Thr Thr Ile Phe 50 55 60

Asp Tyr Lys His Gly Tyr Ile Ala Ser Arg Val Leu Ser Arg Ala

65 70 75 80

Cys Phe Ile Leu Lys Met Asp His Gln Asn Ile Pro Pro Leu Asn Asn 85 90 95

Leu Gln Trp Tyr Ile Tyr Glu Lys Gln Ala Leu Asp Asn Met Phe Ser

Ser Lys Tyr Thr Trp Val Lys Tyr Asn Pro Leu Glu Ser Leu Ile Lys 115 120 125

Asp Val Asp Trp Phe Leu Leu Gly Ser Pro Ile Glu Lys Leu Cys Lys 130 135 140

His Ile Pro Leu Tyr Lys Gly Glu Val Val Glu Asn Thr His Asn Val 145 150 155 160

Gly Ala Gly Gly Cys Ala Lys Ala Gly Leu Leu Gly Ile Leu Gly Ile 165 170 175

Ser Ile Cys Ala Asp Ile His Val 180

<210> 1250

<211> 173

<212> PRT

<213> Homo sapiens

<400> 1250

Met Ala Val Arg Ala Leu Lys Leu Leu Thr Thr Leu Leu Ala Val Val 1 5 10 15

Ala Ala Ser Gl<br/>n Ala Glu Val Glu Ser Glu Ala Gly Tr<br/>p Gly Met 20  $\phantom{000}25\phantom{000}$ 30

Val Thr Pro Asp Leu Leu Phé Ala Glu Gly Thr Ala Ala Tyr Ala Arg 35 40 45

Gly Asp Trp Pro Gly Val Val Leu Ser Met Glu Arg Ala Leu Arg Ser 50 60

Arg Ala Ala Leu Arg Ala Leu Arg Leu Arg Cys Arg Thr Gln Cys Ala 65 70 75 80

Ala Asp Phe Pro Trp Glu Leu Asp Pro Asp Trp Ser Pro Ser Pro Ala 85 90 95

Gln Ala Ser Gly Ala Ala Ala Leu Arg Asp Leu Ser Phe Phe Gly Gly
100 105 110

Leu Leu Arg Arg Ala Ala Cys Leu Arg Arg Cys Leu Gly Pro Pro Ala 115 120 125

Ala Thr Arg Ser Ala Lys Arg Trp Ser Trp Ser Ser Ala Ser Gly Pro

Leu Gln Leu Pro Ala Gly Arg Leu Leu Gln Asp Gln Gln Val Gly Glu 145 150 155 160

Ser Cys Cys Cys Ser Thr His Leu Leu Arg Gly Gln Ser 165 170

<210> 1251

<211> 359

<212> PRT

<213> Homo sapiens

<400> 1251

Met Ala Val Arg Ala Leu Lys Leu Leu Thr Thr Leu Leu Ala Val Val 1 5 10 15

Ala Ala Ser Gln Ala Glu Val Glu Ser Glu Ala Gly Trp Gly Met
20 25 30

Val Thr Pro Asp Leu Leu Phe Ala Glu Gly Thr Ala Ala Tyr Ala Arg 35 40 45

Gly Asp Trp Pro Gly Val Val Leu Ser Met Glu Arg Ala Leu Arg Ser 50 60

Arg Ala Ala Leu Arg Ala Leu Arg Leu Arg Cys Arg Thr Gln Cys Ala 65 70 75 80

Ala Asp Phe Pro Trp Glu Leu Asp Pro Asp Trp Ser Pro Ser Pro Ala 85 90 95

Gln Ala Ser Gly Ala Ala Ala Leu Arg Asp Leu Ser Phe Phe Gly Gly  $100 \ \ 105 \ \ \ 110$ 

Leu Leu Arg Arg Ala Ala Cys Leu Arg Arg Cys Leu Gly Pro Pro Ala 115 120 125

Ala His Ser Leu Ser Glu Glu Met Glu Leu Glu Phe Arg Lys Arg Ser 130 140

Pro Tyr Asn Tyr Leu Gln Val Ala Tyr Phe Lys Ile Asn Lys Leu Glu 145 150 155 160

Lys Ala Val Ala Ala Ala His Thr Phe Phe Val Gly Asn Pro Glu His
165 170 175

Met Glu Met Gln Gln Asn Leu Asp Tyr Tyr Gln Thr Met Ser Gly Val 180 185 190

Lys Glu Ala Asp Phe Lys Asp Leu Glu Thr Gln Pro His Met Gln Glu 195 200 205

Phe Arg Leu Gly Val Arg Leu Tyr Ser Glu Glu Gln Pro Gln Glu Ala 210 215 220

Val Pro His Leu Glu Ala Ala Leu Gln Glu Tyr Phe Val Ala Tyr Glu 225 230 235 240

Glu Cys Arg Ala Leu Cys Glu Gly Pro Tyr Asp Tyr Asp Gly Tyr Asn 245 250 255

Tyr Leu Glu Tyr Asn Ala Asp Leu Phe Gln Ala Ile Thr Asp His Tyr 260 265 270

Ile Gln Val Leu Asn Cys Lys Gln Asn Cys Val Thr Glu Leu Ala Ser 275 280 285

His Pro Ser Arg Glu Lys Pro Phe Glu Asp Phe Leu Pro Ser His Tyr 290 295 300

Asn Tyr Leu Gln Phe Ala Tyr Tyr Asn Ile Gly Asn Tyr Thr Gln Ala 305 310 320

Val Glu Cys Ala Lys Thr Tyr Leu Leu Phe Phe Pro Asn Asp Glu Val 325 330 335

Met Asn Gln Asn Leu Ala Leu Leu Cys Ser Tyr Ala Trp Arg Arg Thr 340 345 350

His Gln Ile His Arg Pro Pro 355

<210> 1252

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1252

Met Thr Ile Phe Thr Pro Phe Leu Val Leu Leu Leu Val Asn Ser

Pro Arg Phe Ser Thr Ile Thr Leu Met Arg Ser Gly Phe His Asn Pro 20 25 30

Ser Val Cys Leu Ser Phe Thr Leu Lys Pro Gln Cys Tyr Leu Val Leu 35 40 45

Met Tyr Gln Lys Asn Arg Arg Gln Asp Gly Ser Lys Val Phe Phe Lys 50 60

Thr Ala Arg Leu Lys Phe Tyr Leu Asn Ile Thr Ala Lys 70 75 ,

<210> 1253

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1253

Met Thr Ile Phe Thr Pro Phe Leu Val Leu Leu Leu Val Asn Ser

Pro Arg Phe Ser Thr Ile Thr Leu Met Arg Ser Gly Phe His Asn Pro 20 25 30

Ser Val Cys Leu Ser Phe Thr Leu Lys Pro Gln Cys Tyr Leu Val Leu 35 40 45

Met Tyr Gln Lys Asn Arg Gln Asp Gly Ser Lys Val Phe Phe Lys 50 55 60

Thr Ala Arg Leu Lys Phe Tyr Leu Asn Ile Thr Ala Lys
65 70 75

<210> 1254

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (136)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1254

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu Leu 1 5 10 15

Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp Lys Thr 20 25 30

Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly Phe Ser Lys 35 40 45

Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly Ile Thr Gln Cys 50 60

Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala Asp Ile Gln Ala Ala 65 70 75 80

Gln Ala Met Met Val Thr Ser Ser Ala Ile Ser Ser Leu Ala Cys Ile 85 90 95

Ile Ser Val Val Gly Met Arg Cys Thr Val Phe Cys Gln Glu Ser Arg
100 105 110

Ala Lys Asp Arg Val Ala Val Ala Gly Gly Val Phe Phe Ile Leu Gly 115 120 125

Ser Leu Leu Gly Phe Ile Pro Xaa Ala Trp Asn Leu 130 135 140

<210> 1255

<211> 86

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1255

Arg Arg Phe Tyr Ser Pro Leu Val Pro Asp Ser Met Lys Phe Glu Ile 1 5 10 15

Gly Glu Ala Leu Tyr Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile 20 30

Xaa Gly Ile Ile Leu Cys Phe Ser Cys Ser Xaa Gln Arg Asn Arg Ser 35 40 45

Asn Tyr Tyr Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser 50 55 60

Pro Arg Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr 65 70 75 80

Ser Leu Thr Gly Tyr Val 85

<210> 1256

<211> 230

<212> PRT

<213> Homo sapiens

<400> 1256

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu Leu 1 5 10 15

Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp Lys Thr  $20 \\ 25 \\ 30$ 

Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly Phe Ser Lys 35 40 45

Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly Ile Thr Gln Cys
50 55 60

Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala Asp Ile Gln Ala Ala 65 70 75 80

Gln Ala Met Met Val Thr Ser Ser Ala Ile Ser Ser Leu Ala Cys Ile 85 90 95

Ile Ser Val Val Gly Met Arg Cys Thr Val Phe Cys Gln Glu Ser Arg

Ala Lys Asp Arg Val Ala Val Ala Gly Gly Val Phe Phe Ile Leu Gly
115 120 125

Gly Leu Leu Gly Phe Ile Pro Val Ala Trp Asn Leu His Gly Ile Leu 130 135 140

Arg Asp Phe Tyr Ser Pro Leu Val Pro Asp Ser Met Lys Phe Glu Ile 145 150 155 160

Gly Glu Ala Leu Tyr Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile 165 170 175

Ala Gly Ile Ile Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser 180 185 190

Asn Tyr Tyr Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser 195 200 205

Pro Arg Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr 210 215 220

Ser Leu Thr Gly Tyr Val 225 230

<210> 1257

<211> 331

<212> PRT

<213> Homo sapiens

<400> 1257

Met Trp Leu Trp Glu Asp Gln Gly Gly Leu Leu Gly Pro Phe Ser Phe
1 5 10 15

Leu Leu Val Leu Leu Leu Val Thr Arg Ser Pro Val Asn Ala Cys 20 25 30

Leu Leu Thr Gly Ser Leu Phe Val Leu Leu Arg Val Phe Ser Phe Glu 35 40 45

Pro Val Pro Ser Cys Arg Ala Leu Gln Val Leu Lys Pro Arg Asp Arg 50 55 60

Ile Ser Ala Ile Ala His Arg Gly Gly Ser His Asp Ala Pro Glu Asn 65 70 75 80

Thr Leu Ala Ala Ile Arg Gln Ala Ala Lys Asn Gly Ala Thr Gly Val 85 90 95

Glu Leu Asp Ile Glu Phe Thr Ser Asp Gly Ile Pro Val Leu Met His
100 105 110

Asp Asn Thr Val Asp Arg Thr Thr Asp Gly Thr Gly Arg Leu Cys Asp 115 120 125

Leu Thr Phe Glu Gln Ile Arg Lys Leu Asn Pro Ala Ala Asn His Arg 130 135 140

Leu Arg Asn Asp Phe Pro Asp Glu Lys Ile Pro Thr Leu Arg Glu Ala 145 150 155 160

Val Ala Glu Cys Leu Asn His Asn Leu Thr Ile Phe Phe Asp Val Lys
165 170 175

Gly His Ala His Lys Ala Thr Glu Ala Leu Lys Lys Met Tyr Met Glu 180 185 190

Phe Pro Gln Leu Tyr Asn Asn Ser Val Val Cys Ser Phe Leu Pro Glu 195 200 205

Val Ile Tyr Lys Met Arg Gln Thr Asp Arg Asp Val Ile Thr Ala Leu 210 215 220

Thr His Arg Pro Trp Ser Leu Ser His Thr Gly Asp Gly Lys Pro Arg 225 230 235 240

Tyr Asp Thr Phe Trp Lys His Phe Ile Phe Val Met Met Asp Ile Leu 245 250 255

Leu Asp Trp Ser Met His Asn Ile Leu Trp Tyr Leu Cys Gly Ile Ser 260 265 270

Ala Phe Leu Met Gln Lys Asp Phe Val Ser Pro Ala Tyr Leu Lys Lys 275 280 285

Trp Ser Ala Lys Gly Ile Gln Val Val Gly Trp Thr Val Asn Thr Phe 290 295 300

Asp Glu Lys Ser Tyr Tyr Glu Ser His Leu Gly Ser Ser Tyr Ile Thr 305 310 315 320

Asp Ser Met Val Glu Asp Cys Glu Pro His Phe 325 330

<210> 1258

<211> 27

<212> PRT

<213> Homo sapiens

<400> 1258

Gly Thr Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg

1 5 10 15

Pro Ile Gly Val His Leu His Ser Val Arg Asp 20 25

<210> 1259

<211> 485

<212> PRT

<213> Homo sapiens

<400> 1259

Ala Arg Gly Arg Leu Leu Pro Trp Trp Leu Ala Ala Gly Cys Ser Met

1 5 10 . 15

Ser Arg Leu Gly Ala Leu Gly Gly Ala Arg Ala Gly Leu Gly Leu Leu 20 25 30

Leu Gly Thr Ala Ala Gly Leu Gly Phe Leu Cys Leu Leu Tyr Ser Gln 35 40 45

- Arg Trp Lys Arg Thr Gln Arg His Gly Arg Ser Gln Ser Leu Pro Asn 50 55 60

| Ser<br>65           | Leu        | Asp        | Tyr        | Thr        | Gln<br>70  | Thr        | Ser        | Asp        | Pro        | Gly<br>75  | Arg        | His        | Val        | Met        | Leu<br>80  |
|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Leu                 | Arg        | Ala        | Val        | Pro<br>85  | Gly        | Gly        | Ala        | Gly        | Asp<br>90  | Ala        | Ser        | Val        | Leu        | Pro<br>95  | Ser        |
| Leu                 | Pro        | Arg        | Glu<br>100 | Gly        | Gln        | Glu        | Lys        | Val<br>105 | Leu        | Asp        | Arg        | Leu        | Asp<br>110 | Phe        | Val        |
| Leu                 | Thr        | Ser<br>115 | Leu        | Val        | Ala        | Leu        | Arg<br>120 | Arg        | Glu        | Val        | Glu        | Glu<br>125 | Leu        | Arg        | Ser        |
| Ser                 | Leu<br>130 | Arg        | Gly        | Leu        | Ala        | Gly<br>135 | Glu        | Ile        | Val        | Gly        | Glu<br>140 | Val        | Arg        | Cys        | His        |
| Met<br>1 <u>4</u> 5 | Glu        | Glu        | Asn        | Gln        | Arg<br>150 | Val        | Ala        | Arg        | Arg        | Arg<br>155 |            | Phe        | Pro        | Phe        | Val<br>160 |
| Arg                 | Glu        | Arg        | Ser        | Asp<br>165 | Ser        | Thr        | Gly        | Ser        | Ser<br>170 | Ser        | Val        | Tyr        | Phe        | Thr<br>175 | Ala        |
| Ser                 | Ser        | Gly        | Ala<br>180 | Thr        | Phe        | Thr        | Asp        | Ala<br>185 | Glu        | Ser        | Glu        | Gly        | Gly<br>190 | Tyr        | Thr        |
| Thr                 | Ala        | Asn<br>195 | Ala        | Glu        | Ser        | Asp        | Asn<br>200 | Glu        | Arg        | Asp        | Ser        | Asp<br>205 | Lys        | Glu        | Ser        |
| Glu                 | Asp<br>210 | Gly        | Glu        | Asp        | Glu        | Val<br>215 | Ser        | Cys        | Glu        | Thr        | Val<br>220 | Lys        | Met        | Gly        | Arg        |
| Lys<br>225          | Asp        | Ser        | Leu        | Asp        | Leu<br>230 | Glu        | Glu        | Glu        | Ala        | Ala<br>235 | Ser        | Gly        | Ala        | Ser        | Ser<br>240 |
| Ala                 | Leu        | Glu        | Ala        | Gly<br>245 | Gly        | Ser        | Ser        | Gly        | Leu<br>250 | Glu        | Asp        | Val        | Leu        | Pro<br>255 | Leu        |
| Leu                 | Gln        | Gln        | Ala<br>260 | Asp        | Glu        | Leu        | His        | Arg<br>265 | Gly        | Asp        | Glu        | Gln        | Gly<br>270 | Lys        | Arg        |
| Glu                 | Gly        | Phe<br>275 | Gln        | Leu        | Leu        | Leu        | Asn<br>280 | Asn        | Lys        | Leu        | Val        | Tyr<br>285 | Gly        | Ser        | Arg        |
| Gln                 | Asp<br>290 | Phe        | Leu        | Trp        | Arg        | Leu<br>295 | Ala        | Arg        | Ala        | Tyr        | Ser<br>300 | Asp        | Met        | Cys        | Glu        |
| Leu<br>305          | Thr        | Glu        | Glu        | Val        | Ser<br>310 | Glu        | Lys        | Lys        | Ser        | Tyr<br>315 | Ala        | Leu        | Asp        | Gly        | Lys<br>320 |
| Glu                 | Glu        | Ala        | Glu        | Ala<br>325 | Ala        | Leu        | Glu        | Lys        | Gly<br>330 |            | Glu        | Ser        | Ala        | Asp<br>335 | Cys        |
| His                 | Leu        | Trp        | Tyr<br>340 | Ala        | Val        | Leu        | Суѕ        | Gly<br>345 |            | Leu        | Ala        | Glu        | His<br>350 | Glu        | Ser        |
| Ile                 | Gln        | Arg<br>355 | Arg        | Ile        | Gln        | Ser        | Gly<br>360 | Phe        | Ser        | Phe        | Lys        | Glu<br>365 | His        | Val        | Asp        |
| Lys                 | Ala<br>370 | Ile        | Ala        | Leu        | Gln        | Pro<br>375 | Glu        | Asn        | Pro        | Met        | Ala<br>380 | His        | Phe        | Leu        | Leu        |

Gly Arg Trp Cys Tyr Gln Val Ser His Leu Ser Trp Leu Glu Lys Lys 385 390 395 400

Thr Ala Thr Ala Leu Leu Glu Ser Pro Leu Ser Ala Thr Val Glu Asp 405 410 415

Ala Leu Gln Ser Phe Leu Lys Ala Glu Glu Leu Gln Pro Gly Phe Ser 420 425 430

Lys Ala Gly Arg Val Tyr Ile Ser Lys Cys Tyr Arg Glu Leu Gly Lys 435 440 445

Asn Ser Glu Ala Arg Trp Trp Met Lys Leu Ala Leu Glu Leu Pro Asp 450 455 460

Val Thr Lys Glu Asp Leu Ala Ile Gln Lys Asp Leu Glu Glu Leu Glu 465 470 475 480

Val Ile Leu Arg Asp 485

<210> 1260

<211> 470

<212> PRT

<213> Homo sapiens

<400> 1260

Met Ser Arg Leu Gly Ala Leu Gly Gly Ala Arg Ala Gly Leu Gly Leu 1 5 10 15

Leu Leu Gly Thr Ala Ala Gly Leu Gly Phe Leu Cys Leu Leu Tyr Ser  $20 \\ 25 \\ 30$ 

Gln Arg Trp Lys Arg Thr Gln Arg His Gly Arg Ser Gln Ser Leu Pro 35 40 45

Asn Ser Leu Asp Tyr Thr Gln Thr Ser Asp Pro Gly Arg His Val Met 50 60

Leu Leu Arg Ala Val Pro Gly Gly Ala Gly Asp Ala Ser Val Leu Pro 65 70 75 80

Ser Leu Pro Arg Glu Gly Gln Glu Lys Val Leu Asp Arg Leu Asp Phe 85 90 95

Val Leu Thr Ser Leu Val Ala Leu Arg Arg Glu Val Glu Glu Leu Arg 100 105 110

Ser Ser Leu Arg Gly Leu Ala Gly Glu Ile Val Gly Glu Val Arg Cys 115 120 125

His Met Glu Glu Asn Gln Arg Val Ala Arg Arg Arg Arg Phe Pro Phe 130 135 140

Val Arg Glu Arg Ser Asp Ser Thr Gly Ser Ser Ser Val Tyr Phe Thr 145 150 155 160

Ala Ser Ser Gly Ala Thr Phe Thr Asp Ala Glu Ser Glu Gly Gly Tyr 170 Thr Thr Ala Asn Ala Glu Ser Asp Asn Glu Arg Asp Ser Asp Lys Glu Ser Glu Asp Gly Glu Asp Glu Val Ser Cys Glu Thr Val Lys Met Gly Arg Lys Asp Ser Leu Asp Leu Glu Glu Glu Ala Ala Ser Gly Ala Ser 215 Ser Ala Leu Glu Ala Gly Gly Ser Ser Gly Leu Glu Asp Val Leu Pro Leu Leu Gln Gln Ala Asp Glu Leu His Arg Gly Asp Glu Gln Gly Lys Arg Glu Gly Phe Gln Leu Leu Leu Asn Asn Lys Leu Val Tyr Gly Ser Arg Gln Asp Phe Leu Trp Arg Leu Ala Arg Ala Tyr Ser Asp Met Cys 280 Glu Leu Thr Glu Glu Val Ser Glu Lys Lys Ser Tyr Ala Leu Asp Gly Lys Glu Glu Ala Glu Ala Ala Leu Glu Lys Gly Asp Glu Ser Ala Asp 310 315 Cys His Leu Trp Tyr Ala Val Leu Cys Gly Gln Leu Ala Glu His Glu 325 330 Ser Ile Gln Arg Arg Ile Gln Ser Gly Phe Ser Phe Lys Glu His Val 345 Asp Lys Ala Ile Ala Leu Gln Pro Glu Asn Pro Met Ala His Phe Leu Leu Gly Arg Trp Cys Tyr Gln Val Ser His Leu Ser Trp Leu Glu Lys 375 Lys Thr Ala Thr Ala Leu Leu Glu Ser Pro Leu Ser Ala Thr Val Glu Asp Ala Leu Gln Ser Phe Leu Lys Ala Glu Glu Leu Gln Pro Gly Phe 405 410 Ser Lys Ala Gly Arg Val Tyr Ile Ser Lys Cys Tyr Arg Glu Leu Gly Lys Asn Ser Glu Ala Arg Trp Trp Met Lys Leu Ala Leu Glu Leu Pro Asp Val Thr Lys Glu Asp Leu Ala Ile Gln Lys Asp Leu Glu Glu Leu

Glu Val Ile Leu Arg Asp

465

<210> 1261

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1261

Met Pro Asp Lys Arg Glu Ala Thr Ala Ala Ala Val Ala Leu Phe Ile 1 5 10 15

Val Pro Leu Gly Val Trp Met Arg Gly Ser Arg Gly Tyr Ser Ala Ala 20 25 30

His Glu Gly Ser Leu 35

<210> 1262

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1262

Met Pro Asp Lys Arg Glu Ala Thr Ala Ala Ala Val Ala Leu Phe Ile 1 5 10 15

Val Pro Leu Gly Val Trp Met Arg Gly Ser Arg Gly Tyr Ser Ala Ala 20 25 30

His Glu Gly Ser Leu 35

<210> 1263

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1263

Met Leu Val Cys Met Leu Gly Cys Leu Ala Asn Leu Val Val Gly
1 5 10 15

Phe Leu Lys Glu Lys Thr Phe Pro Leu Ala Met Ala Arg Thr Arg Gly 20 25 30

Ser Ser Leu Ser Leu Leu Pro Thr Pro Pro Phe Pro Cys Pro Cys Pro 40 45

Asp Ala Ser Arg Leu Arg Glu Lys His Cys Ile Gln Thr Glu Gly Ser 50 60

Ala Ala Ser Phe Gln Lys Val Ile Gly Lys Ala Leu Glu Arg Arg Ala 65 70 75 80

Val Leu Gln Leu Ala Leu Phe Leu His His Pro Pro Ser Leu Cys Ile 85 90 95

Met His Leu Leu Leu Pro Pro Gly Leu 100 105

<210> 1264

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1264

Met Leu Val Cys Met Leu Gly Cys Leu Ala Asn Leu Val Val Gly
1 5 10 15

Phe Leu Lys Glu Lys Thr Phe Pro Leu Ala Met Ala Arg Thr Arg Gly
20 25 30

Ser Ser Leu Ser Leu Leu Pro Thr Pro Pro Phe Pro Cys Pro Cys Pro 35 40 45

Asp Ala Ser Arg Leu Arg Glu Lys His Cys Ile Gln Thr Glu Gly Ser 50 55 60

Ala Ala Ser Phe Gln Lys Val Ile Gly Lys Ala Leu Glu Arg Arg Ala 65 70 75 80

Val Leu Gln Leu Ala Leu Phe Leu His His Pro Pro Ser Leu Cys Ile 85 90 95

Met His Leu Leu Pro Pro Gly Leu 100 105

<210> 1265

<211> 101

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1265

Met Thr Leu Cys Leu Val Thr Phe Leu Thr Ser Leu Pro Thr Ser Val

Pro Ala Cys Thr Ser Cys Trp Pro Gly Phe Met Arg Ser Ser Lys Asn 20 25 30

Ala Tyr Asp Thr His His Trp Gly Gly Gln Arg Ser Met Asn Leu Glu 35 40 45

Ser Leu Thr Cys Gly Gln Leu Ala Ile Arg Trp Thr Arg Gly Trp Met
50 60

Thr Arg Pro Arg Gln Val Trp Ala Met Pro Gly Gln Thr Val Asp Val 65 70 75 80

Tyr Leu Gly Arg Met Leu Gln Gly Val Val Leu Arg Gly Gln Thr Leu 85 90 95

Arg Gly Arg Ala Xaa 100

<210> 1266

<211> 50

<212> PRT

<213> Homo sapiens

<400> 1266

Lys Ala Val Thr Gly Trp Ala His Trp Leu Thr Pro Ile Ile Pro Ala 1 5 10 15

Leu Trp Glu Ala Lys Ala Gly Arg Ser Leu Glu Val Arg Ile Ser Arg 20 25 30

Pro Ala Trp Ser Thr Trp Gln Asn Leu Val Ser Thr Lys Asn Thr Lys 35 40 45

Ile Arg

<210> 1267

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1267

Glu Val Leu Phe Ser Asn Asp Ser Val Leu Gly His Phe Pro His Gln
1 5 10 15

Ser Pro Asn Glu Arg Ala Arg Leu Tyr Phe Leu Leu Ala Trp Phe His 20 25 30

Ala Ile Ile Glu Arg Leu Arg Tyr Ala Pro Leu Gly Trp Ser Lys 35 40 45

Lys Tyr Glu Phe Gly Glu Ser Asp Leu Arg Ser Ala Cys Asp Thr Val

Asp Thr Trp Leu Asp Asp Thr Ala Lys Ala Ser Val Gly His Ala Arg 65 70 75 80

Thr Asp Ser Gly Arg Val Ser Gly Lys Asp Ala Ala Gly Arg Gly Ala 85 90 95

Glu Arg Pro Asp Ser Ala Trp Lys Ser Glu Leu Thr Pro Arg Asp Arg 100 105 110

Gln Ser Leu Ala Gly His Gly Glu 115 120

<210> 1268

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1268

Met Met Cys Val Val Leu Thr Thr Leu Pro Cys Leu Thr Phe Ser Ile
1 5 10 15

Ala Val Thr Glu Val Gln Lys Ser Ile Asn Gly Ser Ala Asp Val Leu 20 25 30

Pro Asp Met Leu Pro Asp Leu Pro Val Ser Leu Val Leu Ser Leu 35 40 45

Ile Met Val Asp Ile Ile Glu Lys Leu Arg Ile Tyr Pro Leu Arg Gly 50 55 60

Ser Gln Lys Ser Ser Glu Asn Gly His Ile His Ser Thr Ser Leu Gln 65 70 75 80

His Ile Lys Thr Val Thr Glu Gln Val Arg Gln Ser Pro Glu Asn Ala 85 90 95

Ala Ser Pro Gln Ala Thr Asn 100

<210> 1269

<211> 261

<212> PRT

<213> Homo sapiens

<400> 1269

Met Met Cys Val Val Leu Thr Thr Leu Pro Cys Leu Thr Phe Ser Ile 1 5 10 15

Ala Val Thr Glu Val Gln Lys Ser Ile Asn Gly Ser Ala Asp Val Leu 20 25 30

Pro Asp Met Leu Pro Asp Leu Pro Val Ser Leu Val Leu Leu Ser Leu 35 40 45

Ile Met Val Asp Ile Ile Glu Lys Leu Arg Ile Tyr Pro Leu Arg Gly 50 55 60

Ser Gln Lys Ser Ser Glu Asn Gly His Ile His Ser Thr Ser Leu Gln 65 70 75 80

His Ile Lys Thr Val Thr Glu Gln Val Arg Gln Ser Pro Glu Asn Ala \$85\$

Ala Ser Pro Gln Ala Thr Asn Ser Thr Gln Val Ser Gln Pro Ser Gly
100 105 110

Ala Met Thr Arg Ser Gln Glu Ser Val Phe Met Gly Pro Gln Glu Pro
115 120 125

Ser Cys Asp Ser Gly Ile Leu Arg Met Met Ser Arg Arg Asp Val Arg

130 135 140

Ala Glu Leu Phe Leu Trp Ser Phe Leu Leu Trp Ser Asp Thr Ile Glu 145 150 155 160

Met Val Arg Val Ala Gly His Pro Asn Val Tyr Lys Ser Ser Trp Leu 165 170 175

Tyr Fro Val Tyr Ile Phe Ser Phe Ile Ser Leu Leu Arg Ile Thr Phe 180 185 190

Thr Pro Gln Asn Pro Leu Leu Asn Ser Leu Ser Val Leu Leu Gln Asp 195 200 205

Leu Pro Phe Val Phe Val Arg Leu Gly Leu Ile Ile Ala Leu Gly Thr 210 215 220

Ile Thr Pro Val Leu Gly Leu Cys Lys Asn Ile Leu Val Thr Leu Ser 225 230 235 240

Tyr Ile Tyr Phe Asn Tyr Leu Thr Arg Ile Arg Ile Phe Ser Ala Phe 245 250 255

Glu Met Ser Pro Phe 260

<210> 1270

<211> 277

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (158)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (277)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1270

Met Gly Leu Arg Ser Trp Leu Ala Ala Pro Trp Gly Ala Leu Pro Pro 1 5 10 15

Pro Pro Pro Thr Trp Ala Leu Ser Pro Arg Ile Ser Leu Pro Leu Gly 35 40 45

Ser Glu Glu Arg Pro Phe Leu Arg Phe Glu Ala Glu His Ile Ser Asn 50 55 60

Tyr Thr Ala Leu Leu Ser Arg Asp Gly Arg Thr Leu Tyr Val Gly
65 70 75 80

Ala Arg Glu Ala Leu Phe Ala Leu Ser Ser Asn Leu Ser Phe Leu Pro

90 95

Gly Gly Glu Tyr Gln Glu Leu Leu Trp Gly Ala Asp Ala Glu Lys Lys
100 105 110

Gln Gln Cys Ser Phe Lys Gly Lys Asp Pro Gln Arg Asp Cys Gln Asn 115 120 125

Tyr Ile Lys Ile Leu Leu Pro Leu Ser GIy Ser His Leu Phe Thr Cys 130 135 140

Gly Thr Ala Ala Phe Ser Pro Met Cys Thr Tyr Ile Asn Xaa Glu Asn 145 150 155 160

Phe Thr Leu Ala Arg Asp Glu Lys Gly Asn Val Leu Leu Glu Asp Gly 165 170 175

Lys Gly Arg Cys Pro Phe Asp Pro Asn Phe Lys Ser Thr Ala Leu Val.
180 185 190

Val Asp Gly Glu Leu Tyr Thr Gly Thr Val Ser Ser Phe Gln Gly Asn 195 200 205

Asp Pro Ala Ile Ser Arg Ser Gln Ser Leu Arg Pro Thr Lys Thr Glu 210 215 220

Ser Ser Leu Asn Trp Leu Gln Asp Pro Ala Phe Val Ala Ser Ala Tyr 225 230 235 240

Ile Pro Glu Ser Leu Gly Ser Leu Gln Gly Asp Asp Asp Lys Ile Tyr 245 250 255

Phe Phe Phe Ser Glu Thr Gly Gln Glu Phe Glu Phe Glu Asn Thr 260 265 270

Ile Val Ser Gly Xaa 275

<210> 1271

<211> 832

<212> PRT

<213> Homo sapiens

<400> 1271

Met Gly Leu Arg Ser Trp Leu Ala Ala Pro Trp Gly Ala Leu Pro Pro 1 5 10 15

Pro Pro Pro Thr Trp Ala Leu Ser Pro Arg Ile Ser Leu Pro Leu Gly 35 40 45

Ser Glu Glu Arg Pro Phe Leu Arg Phe Glu Ala Glu His Ile Ser Asn 50 55 60

Tyr Thr Ala Leu Leu Ser Arg Asp Gly Arg Thr Leu Tyr Val Gly 65 70 75 80

| Ala        | Yrā        | Glu        | Ala        | Leu<br>85           | Phe        | Ala        | Leu        | Ser        | Ser<br>90  | Asn        | Leu        | Ser        | Phe        | Leu<br>95  | erq        |
|------------|------------|------------|------------|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Gly        | Gly        | Glu        | Tyr<br>100 | Gln                 | Glu        | Leu        | Leu        | Trp<br>105 | Gly        | Ala        | Asp        | Ala        | Glu<br>110 | Lys        | Lys        |
| Gln        | Gln        | Cys<br>115 | Ser        | Phe                 | Lys        | Gly        | Lys<br>120 | Asp        | Pro        | Gln        | Arg        | Asp<br>125 | Cys        | Gln        | Asn        |
| Tyr        | Ile<br>130 | Lys        | Ile        | Leu                 | Leu        | Pro<br>135 | Leu        | Ser        | Gly        | Ser        | His<br>140 | Leu        | Phe        | Thr        | Cys        |
| Gly<br>145 | Thr        | Ala        | Ala        | Phe                 | Ser<br>150 | Pro        | Met        | Cys        | Thr        | Tyr<br>155 | Ile        | Asn        | Met        | Glu        | Asn<br>160 |
| Phe        | Thr        | Leu        | Ala        | Arg<br>165          | Asp        | Glu        | Lys        | Gly        | Asn<br>170 | Val        | Leu        | Leu        | Glu        | Asp<br>175 | Gly        |
| Lys        | Gly        | Arg        | Cys<br>180 | Pro                 | Phe        | Asp        | Pro        | Asn<br>185 | Phe        | Lys        | Ser        | Thr        | Ala<br>190 | Leu        | Val        |
| Val        | Asp        | Gly<br>195 | Glu        | Leu                 | Tyr        | Thr        | Gly<br>200 | Thr        | Val        | Ser        | Ser        | Phe<br>205 | Gln        | Gly        | Asn        |
| Asp        | Pro<br>210 | Ala        | Ile        | Ser                 | Arg        | Ser<br>215 | Gln        | Ser        | Leu        | Arg        | Pro<br>220 | Thr        | Lys        | Thr        | Glu        |
| Ser<br>225 | Ser        | Leu        | Asn        | Trp                 | Leu<br>230 | Gln        | Asp        | Pro        | Ala        | Phe 235    | Val        | Ala        | Ser        | Ala        | Tyr<br>240 |
| Ile        | Pro        | Glu        | Ser        | Leu<br>2 <b>4</b> 5 | Gly        | Ser        | Leu        | Gln        | Gly<br>250 | Asp        | Asp        | Asp        | Lys        | Ile<br>255 | Tyr        |
| Phe        | Phe        | Phe        | Ser<br>260 | Glu                 | Thr        | Gly        | Gln        | Glu<br>265 | Phe        | Glu        | Phe        | Phe        | Glu<br>270 | Asn        | Thr        |
| Ile        | Val        | Ser<br>275 | Arg        | Ile                 | Ala        | Arg        | 11e<br>280 | Суѕ        | Lys        | Gly        | Asp        | Glu<br>285 | Gly        | Gly        | Glu        |
| Arg        | Val<br>290 | Leu        | Gln        | Gln                 | Arg        | Trp<br>295 | Thr        | Ser        | Phe        | Leu        | Lys<br>300 | Ala        | Gln        | Leu        | Leu        |
| Cys<br>305 | Ser        | Arg        | Pro        | Asp                 | Asp<br>310 | Gly        | Phe        | Pro        | Phe        | Asn<br>315 | Val        | Leu        | Gln        | Asp        | Val<br>320 |
| Phe        | Thr        | Leu        | Ser        | Pro<br>325          | Ser        | Pro        | Gln        | Asp        | Trp<br>330 | Arg        | Asp        | Thr        | Leu        | Phe<br>335 | Tyr        |
| Gly        | Val        | Phe        | Thr<br>340 | Ser                 | Gln        | Trp        | His        | Arģ<br>345 | Gly        | Thr        | Thr        | Glu        | Gly<br>350 | Ser        | Ala        |
| Val        | Суѕ        | Val<br>355 | Phe        | Thr                 | Met        | Lys        | Asp<br>360 | Val        | Gln        | Arg        | Val        | Phe<br>365 | Ser        | Gly        | Leu        |
| Tyr        | Lys<br>370 | Glu        | Val        | Asn                 | Arg        | Glu<br>375 | Thr        | Gln        | Gln        | Trp        | Tyr<br>380 | Thr        | Val        | Thr        | His        |
| Pro<br>385 | Val        | Pro        | Thr        | Pro                 | Arg<br>390 | Pro        | Gly        | Ala        | Cys        | 11e<br>395 | Thr        | Asn        | Ser        | Ala        | Arg<br>400 |

| Glu        | Arg                | ГЛS        | Ile        | Asn<br>405 | Ser        | Ser        | Leu        | Gln        | Leu<br>410 | Pro        | Asp        | Arg        | Val        | Leu<br>415 | Asn        |
|------------|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Phe        | Leu                | Lys        | Asp<br>420 | His        | Phe        | Leu        | Met        | Asp<br>425 | Gly        | Gln        | Val        | Arg        | Ser<br>430 | Arg        | Met        |
| Leu        | Leu                | Leu<br>435 | Gln        | Pro        | Gln        | Ala        | Arg<br>440 | Tyr        | Gln        | Arg        | Val        | Ala<br>445 | Val        | His        | Arg        |
| Val        | Pro<br><b>4</b> 50 | Gly        | Leu        | His        | His        | Thr<br>455 | Tyr        | Asp        | Val        | Leu        | Phe<br>460 | Leu        | Gly        | Thr        | Gly        |
| Asp<br>465 | Gly                | Arg        | Leu        | His        | Lys<br>470 | Ala        | Val        | Ser        | Val        | Gly<br>475 | Pro        | Arg        | Val        | His        | Ile<br>480 |
| Ile        | Glu                | Glu        | Leu        | Gln<br>485 | Ile        | Phe        | Ser        | Ser        | Gly<br>490 | Gln        | Pro        | Val        | Gln        | Asn<br>495 | Leu        |
| Leu        | Leu                | Asp        | Thr<br>500 | His        | Arg        | Gly        | Leu        | Leu<br>505 | Tyr        | Ala        | Ala        | Ser        | His<br>510 | Ser        | Gly        |
| Val        | Val                | Gln<br>515 | Val        | Pro        | Met        | Ala        | Asn<br>520 | Суѕ        | Ser        | Leu        | Tyr        | Arg<br>525 | Ser        | Cys        | Gly        |
| Asp        | Cys<br>530         | Leu        | Leu        | Ala        | Arg        | Asp<br>535 | Pro        | Tyr        | Cys        | Ala        | Trp<br>540 | Ser        | Gly        | Ser        | Ser        |
| Cys<br>545 | ГЛЗ                | His        | Val        | Ser        | Leu<br>550 | Tyr        | Gln        | Pro        | Gln        | Leu<br>555 | Ala        | Thr        | Arg        | Pro        | Trp<br>560 |
| Ile        | Gln                | Asp        | Ile        | Glu<br>565 | Gly        | Ala        | Ser        | Ala        | Lys<br>570 | Asp        | Leu        | Суѕ        | Ser        | Ala<br>575 | Ser        |
| Ser        | Val                | Val        | Ser<br>580 | Pro        | Ser        | Phe        | Val        | Pro<br>585 | Thr        | Gly        | Glu        | Lys        | Pro<br>590 | Cys        | Glu        |
| Gln        | Val                | Gln<br>595 | Phe        | Gln        | Pro        | Asn        | Thr<br>600 | Val        | Asn        | Thr        | Leu        | Ala<br>605 | Cys        | Pro        | Leu        |
| Leu        | Ser<br>610         | Asn        | Leu        | Ala        | Thr        | Arg<br>615 | Leu        | Trp        | Leu        | Arg        | Asn<br>620 | Gly        | Ala        | Pro        | Val        |
| Asn<br>625 | Ala                | Ser        | Ala        | Ser        | Суs<br>630 | His        | Val        | Leu        | Pro        | Thr<br>635 | Gly        | Asp        | Leu        | Leu        | Leu<br>640 |
| Val        | Gly                | Thr        | Gln        | Gln<br>645 | Leu        | Gly        | Glu        | Phe        | Gln<br>650 | Cys        | Trp        | Ser        | Leu        | Glu<br>655 | Glu        |
| Gly        | Phe                | Gln        | Gln<br>660 | Leu        | Val        | Ala        | Ser        | Туг<br>665 | Суѕ        | Pro        | Glu        | Val        | Val<br>670 | Glu        | Asp        |
| Gly        | Va1                | Ala<br>675 | Asp        | Gln        | Thr        | Asp        | Glu<br>680 | Gly        | Gly        | Ser        | Val        | Pro<br>685 | Val        | Ile        | Ile        |
| Ser        | Thr<br>690         | Ser        | Arg        | Val        | Ser        | Ala<br>695 | Pro        | Ala        | Gly        | Gly        | Lys<br>700 | Ala        | Ser        | Trp        | Gly        |
| Ala<br>705 | Asp                | Arg        | Ser        | Tyr        | Trp<br>710 | Lys        | Glu        | Phe        | Leu        | Val<br>715 | Met        | Cys        | Thr        | Leu        | Phe<br>720 |

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Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His Arg
                                  730
Ası. Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val His
                              745
Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu Asn
       755
                          760
                                             765
Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln Ser
Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu Lys
785 790
                          795
Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val Cys
Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val Val
           820
                              825
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<210> 1272 <211> 196 <212> PRT

<213> Homo sapiens

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<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<201> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<202> (156)
<223> Xaa equals any of the naturally occurring L-amino acids
<1:10>
<311> SITE
<222> (184)
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1272

Met Gly Lys Trp Lys Glu Ser Leu Gln Asn Ala Xaa His Leu Pro Pro 1 5 10

Ile Leu Leu Arg Xaa Ile His Leu Phe Cys Ala Val Leu Ala Gly 20 25 30

Gly Lys Glu Asn Gly Gln Met Ala Val Ser Asp Gly Ser Val Lys Gly 35 40 45

Leu Leu Ser Val Val Arg Xaa Trp Ser Arg Gly Pro Ala Pro Asp Pro 50 60

Cys Leu Val Pro Leu Ala Leu Glu Ala Leu Val Gly Ala Val His Val 65 70 75 80

Leu His Ala Ser Arg Ala Pro Pro Arg Gly Pro Glu Leu Arg Ala Leu 85 90 95

Leu Glu Ser Tyr Phe His Val Leu Asn Ala Asp Trp Pro Ala Gly Leu
100 105 110

Ser Ser Gly Pro Glu Glu Ala Leu Val Thr Leu Arg Val Ser Met Leu 115 120 125

Asp Ala Ile Pro Met Met Leu His Val Lys Thr Gly Gln Cys Leu Gln 130 135 140

Pro Pro Xaa Ser Ala Thr Ile Ala Leu Asn Thr Xaa Leu Gly Ser Phe 145 150 155 160

Lys Asn Lys Gln Gly Ser Trp Thr Lys Thr Gln Thr His Cys Ser Pro \$165\$ \$170\$ \$175\$

Cys Ser Gln Ser Ala Asp Leu Xaa His Glu Val Thr Pro Leu Gly Pro 180 185 190

Arg Arg Trp Leu 195

<210> 1273

<211> 347

<212> PRT

<213> Homo sapiens

<400> 1273

Met Ser Ser Trp Ser Arg Gln Arg Pro Lys Ser Pro Gly Gly Ile Gln 1 5 10 15

Pro His Val Ser Arg Thr Leu Phe Leu Leu Leu Leu Leu Ala Ala Ser

Ala Trp Gly Val Thr Leu Ser Pro Lys Asp Cys Gln Val Phe Arg Ser
35 40 45

Asp His Gly Ser Ser Ile Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly

| 50 | 55 | 60 |
|----|----|----|
|    |    |    |

Tyr Leu Pro Ala Asp Thr Val His Leu Ala Val Glu Phe Phe Asn Leu 65 70 75 80

Thr His Leu Pro Ala Asn Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu 85 90 95

Leu His Leu Ser Ser Asn Gly Leu Glu Ser Leu Ser Fro Glu Phe Leu 100 105 110

Arg Pro Val Pro Gln Leu Arg Val Leu Asp Leu Thr Arg Asn Ala Leu 115 120 125

Thr Gly Leu Pro Ser Gly Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr 130 135 140

Leu Val Leu Lys Glu Asn Gln Leu Glu Val Leu Glu Val Ser Trp Leu 145 150 155 160

His Gly Leu Lys Ala Leu Gly His Leu Asp Leu Ser Gly Asn Arg Leu 165 170 175

Arg Lys Leu Pro Pro Gly Leu Leu Ala Asn Phe Thr Leu Leu Arg Thr 180 185 190

Leu Asp Leu Gly Glu Asn Gln Leu Glu Thr Leu Pro Pro Asp Leu Leu 195 200 205

Arg Gly Pro Leu Gln Leu Glu Arg Leu His Leu Glu Gly Asn Lys Leu 210 215 220

Gln Val Leu Gly Lys Asp Leu Leu Leu Pro Gln Pro Asp Leu Arg Tyr 225 230 230 240

Leu Phe Leu Asn Gly Asn Lys Leu Ala Arg Val Ala Ala Gly Ala Phe \$245\$ \$250\$

Gln Gly Leu Arg Gln Leu Asp Met Leu Asp Leu Ser Asn Asn Ser Leu 260 265 270

Ala Ser Val Pro Glu Gly Leu Trp Ala Ser Leu Gly Gln Pro Asn Trp 275 280 285

Asp Met Arg Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp 290 295 300

Gln Asn Leu Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys 305 310 315 320

Met Phe Ser Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys 325 330 335

Gly Gln Thr Leu Leu Ala Val Ala Lys Ser Gln 340 345

<210> 1274 <211> 347

<212> PRT

<213> Homo sapiens

<400> 1274

Met Ser Ser Trp Ser Arg Gln Arg Pro Lys Ser Pro Gly Gly Ile Gln  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Pro His Val Ser Arg Thr Leu Phe Leu Leu Leu Leu Leu Ala Ala Ser

Ala Trp Gly Val Thr Leu Ser Pro Lys Asp Cys Gln Val Phe Arg Ser 35 40 45

Asp His Gly Ser Ser Ile Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly 50 55 60

Tyr Leu Pro Ala Asp Thr Val His Leu Ala Val Glu Phe Phe Asn Leu 65 70 75 80

Thr His Leu Pro Ala Asn Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu 85 90 . 95

Leu His Leu Ser Ser Asn Gly Leu Glu Ser Leu Ser Pro Glu Phe Leu
100 105 110

Arg Pro Val Pro Gln Leu Arg Val Leu Asp Leu Thr Arg Asn Ala Leu 115 120 125

Thr Gly Leu Pro Ser Gly Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr 130 135 140

Leu Val Leu Lys Glu Asn Gln Leu Glu Val Leu Glu Val Ser Trp Leu 145. 150 155 160

His Gly Leu Lys Ala Leu Gly His Leu Asp Leu Ser Gly Asn Arg Leu 165 170 175

Arg Lys Leu Pro Pro Gly Leu Leu Ala Asn Phe Thr Leu Leu Arg Thr
180 185 190

Leu Asp Leu Gly Glu Asn Gln Leu Glu Thr Leu Pro Pro Asp Leu Leu 195 200 205

Arg Gly Pro Leu Gln Leu Glu Arg Leu His Leu Glu Gly Asn Lys Leu 210 215 220

Gln Val Leu Gly Lys Asp Leu Leu Pro Gln Pro Asp Leu Arg Tyr 225 230 235 240

Leu Phe Leu Asn Gly Asn Lys Leu Ala Arg Val Ala Ala Gly Ala Phe 245 250 255

Gln Gly Leu Arg Gln Leu Asp Met Leu Asp Leu Ser Asn Asn Ser Leu 260 265 270

Ala Ser Val Pro Glu Gly Leu Trp Ala Ser Leu Gly Gln Pro Asn Trp 275 280 285

Asp Met Arg Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp 290 295 300

Gln Asn Leu Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys 305 310 315 329

Met Phe Ser Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys 325 330 335

Gly Gln Thr Leu Leu Ala Val Ala Lys Ser Gln 340 345

<210> 1275

<211> 347

<212> PRT

<213> Homo sapiens

<400> 1275

Met Ser Ser Trp Ser Arg Gln Arg Pro Lys Ser Pro Gly Gly Ile Gln  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Pro His Val Ser Arg Thr Leu Phe Leu Leu Leu Leu Leu Ala Ala Ser 20 25 30

Ala Trp Gly Val Thr Leu Ser Pro Lys Asp Cys Gln Val Phe Arg Ser 35 40 45

Asp His Gly Ser Ser Ile Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly 50 55 60

Tyr Leu Pro Ala Asp Thr Val His Leu Ala Val Glu Phe Phe Asn Leu 65 70 75 80

Thr His Leu Pro Ala Asn Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu 85 90 95

Leu His Leu Ser Ser Asn Gly Leu Glu Ser Leu Ser Pro Glu Phe Leu 100 105 110

Arg Pro Val Pro Gln Leu Arg Val Leu Asp Leu Thr Arg Asn Ala Leu 115 120 125

Thr Gly Leu Pro Ser Gly Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr 130 135 140

Leu Val Leu Lys Glu Asn Gln Leu Glu Val Leu Glu Val Ser Trp Leu 145 150 155 160

His Gly Leu Lys Ala Leu Gly His Leu Asp Leu Ser Gly Asn Arg Leu 165 170 175

Arg Lys Leu Pro Pro Gly Leu Leu Ala Asn Phe Thr Leu Leu Arg Thr 180 185 190

Leu Asp Leu Gly Glu Asn Gln Leu Glu Thr Leu Pro Pro Asp Leu Leu 195 200 205

Arg Gly Pro Leu Gln Leu Glu Arg Leu His Leu Glu Gly Asn Lys Leu 215 220

Gln Val Leu Gly Lys Asp Leu Leu Pro Gln Pro Asp Leu Arg Tyr 225 230 235 240

Leu Phe Leu Asn Gly Asn Lys Leu Ala Arg Val Ala Ala Gly Ala Phe 245 250 255

Gln Gly Leu Arg Gln Leu Asp Met Leu Asp Leu Ser Asn Asn Ser Leu 260 265 270

Ala Ser Val Pro Glu Gly Leu Trp Ala Ser Leu Gly Gln Pro Asn Trp 275 280 285

Asp Met Arg Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp 290 . 295 300

Gln Asn Leu Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys 305 310 315 320

Met Phe Ser Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys 325 330 335

Gly Gln Thr Leu Leu Ala Val Ala Lys Ser Gln 340 345

<210> 1276

<211> 286

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (173)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1276

Met Leu Met Leu Met Leu Met Met Phe Ala Val His Cys Thr Trp

1 5 10 15

Val Thr Ser Asn Ala Tyr Ser Ser Pro Ser Val Val Leu Ala Ser Tyr 20 25 30

Asn His Asp Gly Thr Arg Asn Ile Leu Asp Asp Phe Arg Glu Ala Tyr 35 40 45

Phe Trp Leu Arg Gln Asn Thr Asp Glu His Ala Arg Val Met Ser Trp 50 55 60

Trp Asp Tyr Gly Tyr Gln Ile Ala Gly Met Ala Asn Arg Thr Thr Leu 65 70 75 80

Val Asp Asn Asn Thr Trp Asn Asn Ser His Ile Ala Leu Val Gly Lys
85 90 95

Ala Met Ser Ser Asn Glu Thr Ala Ala Tyr Lys Ile Met Arg Thr Leu 100 105 110

Asp Val Asp Tyr Val Leu Val Ile Phe Gly Gly Val Ile Gly Tyr Ser 115 120 125

Gly Asp Asp Ile Asn Lys Phe Leu Trp Met Val Arg Ile Ala Glu Gly 130  $$135\ \ \,$  140

Glu His Pro Lys Asp Ile Arg Glu Ser Asp Tyr Phe Thr Pro Gln Gly 145 150 155 160

Glu Phe Arg Val Asp Lys Ala Gly Ser Pro Thr Leu Xaa Asn Cys Leu 165 170 175

Met Tyr Lys Met Ser Tyr Tyr Arg Phe Gly Glu Met Gln Leu Asp Phe 180 185 190

Arg Thr Pro Pro Gly Phe Asp Arg Thr Arg Asn Ala Glu Ile Gly Asn 195 200 205

Lys Asp Ile Lys Phe Lys His Leu Glu Glu Ala Phe Thr Ser Glu His 210 225 220

Trp Leu Val Arg Ile Tyr Lys Val Lys Ala Pro Asp Asn Arg Glu Thr 225 230 235 240

Leu Asp His Lys Pro Arg Val Thr Asn Ile Phe Pro Lys Gln Lys Tyr 245 250 255

Leu Ser Lys Lys Thr Thr Lys Arg Lys Arg Gly Tyr Ile Lys Asn Lys 260 265 270

Leu Val Phe Lys Lys Gly Lys Lys Ile Ser Lys Lys Thr Val 275 280 285

<210> 1277

<211> 286

<212> PRT

<213> Homo sapiens

<400> 1277

Met Leu Met Leu Met Leu Leu Met Met Phe Ala Val His Cys Thr Trp

1 10 15

Val Thr Ser Asn Ala Tyr Ser Ser Pro Ser Val Val Leu Ala Ser Tyr 20 25 30

Asn His Asp Gly Thr Arg Asn Ile Leu Asp Asp Phe Arg Glu Ala Tyr 35 40 45

Phe Trp Leu Arg Gln Asn Thr Asp Glu His Ala Arg Val Met Ser Trp 50 55 60

Trp Asp Tyr Gly Tyr Gln Ile Ala Gly Met Ala Asn Arg Thr Thr Leu 65 70 75 80

Val Asp Asn Asn Thr Trp Asn Asn Ser His Ile Ala Leu Val Gly Lys 85 90 95

Ala Met Ser Ser Asn Glu Thr Ala Ala Tyr Lys Ile Met Arg Thr Leu 100 105 110

Asp Val Asp Tyr Val Leu Val Ile Phe Gly Gly Val Ile Gly Tyr Ser 115 120 125

- Gly Asp Asp Ile Asn Lys Phe Leu Trp Met Val Arg Ile Ala Glu Gly 130 135 140
- Glu Phe Arg Val Asp Lys Ala Gly Ser Pro Thr Leu Leu Asn Cys Leu 165 170 175
- Met Tyr Lys Met Ser Tyr Tyr Arg Phe Gly Glu Met Gln Leu Asp Phe 180 185 190
- Arg Thr Pro Pro Gly Phe Asp Arg Thr Arg Asn Ala Glu Ile Gly Asn 195 200 205
- Lys Asp Ile Lys Phe Lys His Leu Glu Glu Ala Phe Thr Ser Glu His 210 215 220
- Trp Leu Val Arg Ile Tyr Lys Val Lys Ala Pro Asp Asn Arg Glu Thr 225 230 235 240
- Leu Asp His Lys Pro Arg Val Thr Asn Ile Phe Pro Lys Gln Lys Tyr 245 250 255
- Leu Ser Lys Lys Thr Thr Lys Arg Lys Arg Gly Tyr Ile Lys Asn Lys 260 265 270
- Leu Val Phe Lys Lys Gly Lys Lys Ile Ser Lys Lys Thr Val 275 280 285

<210> 1278

<211> 135

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1278

- Met Ser Ala Leu Arg Pro Leu Leu Leu Leu Leu Leu Pro Leu Cys Pro 1 5 10 15
- Gly Pro Gly Pro Gly Ser Glu Ala Lys Val Thr Arg Ser Cys 20 25 30
- Ala Glu Thr Arg Gln Val Leu Gly Ala Arg Gly Tyr Ser Leu Asn Leu 35 40 45
- Ile Pro Pro Ala Leu Ile Ser Gly Glu His Leu Arg Val Cys Pro Gln 50 55 60
- Glu Tyr Thr Cys Cys Ser Ser Glu Thr Glu Gln Arg Leu Ile Arg Glu 65 70 75 80

Thr Glu Ala Thr Phe Arg Gly Leu Val Glu Asp Ser Gly Ser Phe Leu 85 90 95

Val His Thr Leu Ala Ala Arg His Arg Lys Phe Asp Asp Asn Pro Asp 100 105 110

Pro Gly Gly Cys Pro Ser Leu Leu Cys Lys Ala Trp Arg Leu Glu Glu 115 120 125

Met Trp Ser Ser Glu Xaa Ala 130 135

<210> 1279

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1279

Met Ser Ala Leu Arg Pro Leu Leu Leu Leu Leu Leu Pro Leu Cys Pro 1 5 10 15

Gly Pro Gly Pro Gly Pro Gly Ser Glu Ala Lys Val Thr Arg Ser Cys 20 25 30

Ala Glu Thr Arg Gln Val Leu Gly Ala Arg Gly Tyr Ser Leu Asn Leu 35 40 45

Ile Pro Pro Ala Leu Ile Ser Gly Glu His Leu Arg Val Cys Pro Gln 50 55 60

Glu Tyr Thr Cys Cys Ser Ser Glu Thr Glu Gln Arg Leu Ile Arg Glu 55 70 75 80

Thr Glu Ala Thr Phe Arg Gly Leu Val Glu Asp Ser Gly Ser Phe Leu 85 90 95

Val His Thr Leu Ala Ala Arg His Arg Lys Phe Asp Asp Asn Pro Asp 100 105 110

Pro Gly Gly Cys Pro Ser Leu Cys Ala Gly Pro Gly Asp Trp Lys Lys 115 120 125

Cys Gly Gln Arg Cys Ala 130

<210> 1280

<211> 52

<212> PRT

<213> Homo sapiens

<000>

<321> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
Cys Ala Leu Xaa Phe Glu Phe Phe Phe Phe Phe Phe Leu Arg Trp
                                    10
Ser Leu Gly Asn Lys Ala Arg Leu Xaa Gln Lys Lys Lys Lys Lys
Lys Thr Ser Val Gly Lys Asn Met Glu Asn Trp Asn Pro Asp Thr Leu
Leu Val Gly Leu
    50
<210> 1281
<211> 17
<212> PRT
<213> Homo sapiens
<400> 1281
Met Arg Val Val Ser Gly Thr Leu Phe Ile His Phe Leu Val Leu Ile .
Phe
<210> 1282
<211> 17
<212> PRT
<213> Homo sapiens
<400> 1282
Met Arg Val Val Ser Gly Thr Leu Phe Ile His Phe Leu Val Leu Ile
                5
                                    10
Phe
<210> 1283
<211> 182
<212> PRT
<213> Homo sapiens
<400> 1283
Met Ala Lys Arg Ser Arg Gly Pro Gly Arg Arg Cys Leu Leu Ala Leu
```

25

Val Leu Phe Cys Ala Trp Gly Thr Leu Ala Val Val Ala Gln Lys Pro

20

Gly Ala Gly Cys Pro Ser Arg Cys Leu Cys Phe Arg Thr Thr Val Arg
35 40 45

Cys Met His Leu Leu Glu Ala Val Pro Ala Val Ala Pro Gln Thr 50 55 60

Ser Ile Leu Asp Leu Arg Phe Asn Arg Ile Arg Glu Ile Gln Pro Gly 65 70 75 80

Ala Phe Arg Arg Leu Arg Asn Leu Asn Thr Leu Leu Leu Asn Asn Asn 85 90 95

Gln Ile Lys Arg Ile Pro Ser Gly Ala Phe Glu Asp Leu Glu Asn Leu 100 105 110

Lys Tyr Leu Tyr Leu His Phe Asn Gln Ile Glu Thr Leu Asp Pro Asp 115 120 125

Ser Phe Gln His Leu Pro Lys Leu Glu Arg Leu Phe Leu His Asn Asn 130 135 140

Arg Ile Thr His Leu Val Pro Gly Thr Phe Asn His Leu Glu Ser Met 145 150 155 160

Lys Arg Leu Arg Leu Asp Ser Asn Thr Leu His Cys Asp Cys Glu Ile 165 170 175

Leu Trp Leu Arg Ile Cys 180

<210> 1284

<211> 550

<212> PRT

<213> Homo sapiens

<100> 1284

Ala Leu Pro Gln Gln Ala Ala Val Ala Gly Ile Val Gln Arg Ser Gly
1 5 10 15

Lys Pro Leu Leu Pro Phe Ala Thr Gly Pro Pro Thr Glu Cys Met Arg 20 25 30

Asp Glu Asn Glu Ser Pro Ile Pro Cys Phe Leu Ala Gly Asp His Arg 35 40 45

Ala Asn Glu Gln Leu Gly Leu Thr Ser Met His Thr Leu Trp Phe Arg
50 55 60

Glu His Asn Arg Ile Ala Thr Glu Leu Leu Lys Leu Asn Pro His Trp 65 70 75 80

Asp Gly Asp Thr Ile Tyr Tyr Glu Thr Arg Lys Ile Val Gly Ala Glu 85 90 95

Ile Gln His Ile Thr Tyr Gln His Trp Leu Pro Lys Ile Leu Gly Glu
100 105 110

Val Gly Met Arg Thr Leu Gly Glu Tyr His Gly Tyr Asp Pro Gly Ile

|            |            |            |            |            |            |            |            |            |            |            |            |            |            | -          | 0 - 7 0    |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|            |            | 115        |            |            |            |            | 120        |            |            |            |            | 125        |            |            |            |
| Asn        | Ala<br>130 | Gly        | Ile        | Phe        | Asn        | Ala<br>135 | Phe        | Ala        | Thr        | Ala        | Ala<br>140 | Phe        | Arg        | Phe        | Gly        |
| His<br>145 | Thr        | Leu        | Val        | Asn        | Pro<br>150 | Leu        | Leu        | Tyr        | Arg        | Leu<br>155 | Asp        | Glu        | Asn        | Phe        | Gln<br>160 |
| Pro        | Ile        | Ala        | Gln        | Asp<br>165 | His        | Leu        | Pro        | Leu-       | His<br>170 | Lys        | Ala        | Phe        | Phe        | Ser<br>175 | Pro        |
| Phe        | Arg        | Ile        | Val<br>180 | Asn        | Glu        | Gly        | Gly        | Ile<br>185 | Asp        | Pro        | Leu        | Leu        | Arg<br>190 | Gly        | Leu        |
| Phe        | Gly        | Val<br>195 | Ala        | Gly        | Lys        | Met        | Arg<br>200 | Va1        | Pro        | Ser        | Gln        | Leu<br>205 | Leu        | Asn        | Thr        |
| Glu        | Leu<br>210 | Thr        | Glu        | Arg        | Leu        | Phe<br>215 | Ser        | Met        | Ala        | His        | Thr<br>220 | Val        | Ala        | Leu        | Asp        |
| Leu<br>225 | Ala        | Ala        | Ile        | Asn        | Ile<br>230 | Gln        | Arg        | Gly        | Arg        | Asp<br>235 | His        | Gly        | Ile        | Pro        | Pro<br>240 |
| Tyr        | His        | Asp        | Tyr        | Arg<br>245 | Val        | Tyr        | Cys        | Asn        | Leu<br>250 | Ser        | Ala        | Ala        | His        | Thr<br>255 | Phe        |
| Glu        | Asp        | Leu        | Lys<br>260 | Asn        | Glu        | Ile        | Lys        | Asn<br>265 | Pro        | Glu        | Ile        | Arg        | Glu<br>270 | Lys        | Leu        |
| Lys        | Arg        | Leu<br>275 | Tyr        | Gly        | Ser        | Thr        | Leu<br>280 | Asn        | Ile        | Asp        | Leu        | Phe<br>285 | Pro        | Ala        | Leu        |
| Val        | Val<br>290 | Glu        | Asp        | Leu        | Val        | Pro<br>295 | Gly        | Ser        | Arg        | Leu        | Gly<br>300 | Pro        | Thr        | Leu        | Met        |
| Cys<br>305 | Leu        | Leu        | Ser        | Thr        | Gln<br>310 | Phe        | Lys        | Arg        | Leu        | Arg<br>315 | Asp        | Gly        | Asp        | Arg        | Leu<br>320 |
| Trp        | Tyr        | Glu        | Asn        | Pro<br>325 | Gly        | Väl        | Phe        | Ser        | Pro<br>330 | Ala        | Gln        | Leu        | Thr        | Gln<br>335 | Ile        |
| Lys        | Gln        | Thr        | Ser<br>340 | Leu        | Ala        | Arg        | Ile        | Leu<br>345 | Cys        | Asp        | Asn        | Ala        | Asp<br>350 | Asn        | Ile        |
| Thr        |            | Val<br>355 | Gln        | Ser        | Asp        | Val        | Phe<br>360 | Arg        | Val        | Ala        | Glu        | Phe<br>365 | Pro        | His        | Gly        |
| Tyr        | Gly<br>370 | Ser        | Суѕ        | Asp        | Glu        | Ile<br>375 | Pro        | Arg        | Va1        | Asp        | Leu<br>380 | Arg        | Val        | Trp        | Gln        |
| Asp<br>385 | Cys        | Cys        | Glu        | Asp        | Cys<br>390 | Arg        | Thr        | Arg        | Gly        | Gln<br>395 | Phe        | Asn        | Ala        | Phe        | Ser<br>400 |
| Tyr        | His        | Phe        | Arg        | Gly<br>405 | Arg        | Arg        | Ser        | Leu        | Glu<br>410 | Phe        | Ser        | Tyr        | Gln        | Glu<br>415 | Asp        |

Lys Pro Thr Lys Lys Thr Arg Pro Arg Lys Ile Pro Ser Val Gly Arg
420 425 430

Gln Gly Glu His Leu Ser Asn Ser Thr Ser Ala Phe Ser Thr Arg Ser

435 440 445

Asp Ala Ser Gly Thr Asn Asp Phe Arg Glu Phe Val Leu Glu Met Gln 450 460

Lys Thr Ile Thr Asp Leu Arg Thr Gln Ile Lys Lys Leu Glu Ser Arg 465 470 475 480

Leu Ser Thr Thr Glu Cys Val Asp Ala Gly Gly Glu Ser His Ala Asn 485 490 495

Asn Thr Lys Trp Lys Lys Asp Ala Cys Thr Ile Cys Glu Cys Lys Asp 500 505 510

Gly Gln Val Thr Cys Phe Val Glu Ala Cys Pro Pro Ala Thr Cys Ala 515 520 525

Val Pro Val Asn Ile Pro Gly Ala Cys Cys Pro Val Cys Leu Gln Lys 530 535 540

Arg Ala Glu Glu Lys Pro 545 550

<210> 1285

<211> 210

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (139)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (187)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1285

Met Glu Ala Pro Gly Pro Arg Ala Leu Arg Thr Ala Leu Cys Gly Gly
1 5 10 15

Ala Arg Gly Phe Gly Arg Gly Ala Leu Ile Arg Leu Asn Ile Trp Pro \$35\$ 40 45

Ala Val Gln Gly Ala Cys Lys Gln Leu Glu Val Cys Glu His Cys Val
50 60

Glu Gly Asp Arg Ala Arg Asn Leu Ser Ser Cys Met Trp Glu Gln Cys 65 70 75 80

Arg Pro Glu Glu Pro Gly His Cys Val Ala Gln Ser Glu Val Val Lys 85 90 95

Glu Gly Cys Ser Ile Tyr Asn Arg Ser Glu Ala Cys Pro Ala Ala His

100 105 110

His His Pro Thr Tyr Glu Pro Lys Thr Val Thr Thr Gly Ser Pro Pro 115 120 125

Val Pro Glu Ala His Ser Pro Gly Phe Asp Xaa Ala Ser Phe Ile Gly 130 135 140

Thr Ser Ser Arg Pro Arg Thr Ala Pro Thr Arg Arg Cys Glu Tyr Leu 165 170 175

Ala Ser Ser Lys Tyr Leu Ser Pro Ser Ser Xaa Leu Val Pro Ala His 180 185 190

Val Pro Phe Ser Thr Gln Gly Ala Val Phe Ser Thr Gly Lys Pro Ser 195 200 205

Gly Arg 210

<210> 1286

<211> 173

<212> PRT

<213> Homo sapiens

<400> 1286

Met Glu Ala Pro Gly Pro Arg Ala Leu Arg Thr Ala Leu Cys Gly Gly  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Cys Cys Cys Leu Leu Cys Ala Gl<br/>n Leu Ala Val Ala Gly Lys Gly 20 25 30

Ala Arg Gly Phe Gly Arg Gly Ala Leu Ile Arg Leu Asn Ile Trp Pro 35 40 45

Ala Val Gln Gly Ala Cys Lys Gln Leu Glu Val Cys Glu His Cys Val 50 60

Glu Gly Asp Arg Ala Arg Asn Leu Ser Ser Cys Met Trp Glu Gln Cys 65 70 75 80

Arg Pro Glu Glu Pro Gly His Cys Val Ala Gln Ser Glu Val Val Lys
85 90 95

Glu Gly Cys Ser Ile Tyr Asn Arg Ser Glu Ala Cys Pro Ala Ala His 100 105 110

His His Pro Thr Tyr Glu Pro Lys Thr Val Thr Thr Gly Ser Pro Pro 115 120 125

Val Pro Glu Ala His Ser Pro Gly Phe Asp Gly Ala Ser Phe Ile Gly 130 135

Gly Val Val Leu Val Leu Ser Leu Gln Ala Val Ala Phe Phe Val Leu 145 150 155 160

His Phe Leu Lys Ala Lys Asp Ser Thr Tyr Gln Thr Leu 165 170

<210> 1287

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1287

Met Thr Trp Lys Ile Lys Leu Arg Ser Ala Val Tyr Leu Ser Asp Ala 1 10 15

Thr Val Thr Thr Leu Gly Asn Leu Val Pro Phe Thr Leu Thr Leu Leu 20 25 30

· Cys Phe Leu Leu Ile Cys Ser Leu Cys Lys His Leu Lys Lys Met 35 40 45

Gln Leu His Gly Lys Gly Ser Gln Asp Pro Ser Thr Lys Val His Ile 50 55 60

Lys Val Leu Gln Thr Val Ile Phe Phe Leu Leu Cys Ala Ile Tyr
65 70 75 80

Phe Leu Ser Ile Met Ile Ser-Val Trp Ser Phe Gly Ser Leu Glu Asn
90
95

Lys Pro Val Phe Met Phe Cys Lys Ala Ile Arg Phe Ser Tyr Pro Ser 100 105 110

Ile His Pro Phe Ile Leu Ile Trp Gly Asn Lys Lys Leu Lys Gln Thr 115 120 125

Phe Leu Ser Val Leu Arg Gln Val Arg Tyr Trp Val Lys Gly Glu Lys 130 135 140

Pro Ser Ser Pro 145

<210> 1288

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1288

Asn Glu Arg Val Leu Thr Tyr Ser Leu Ile Gly Ser Ser Ile Ile Arg 1 5 10 15

Lys Lys Cys Thr Val Leu Phe Thr Ala Lys Phe Tyr Leu Thr Val Leu 20 25 30

Ile Leu Gly Val Met Lys Phe Lys Gln Cys Asp Leu Asn Leu Lys Lys 35 40 45

Lys Lys Lys Gly Arg Pro

50 55

<210> 1289

<211> 273

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (200)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1289

Met Arg Leu Pro Gly Val Pro Leu Ala Arg Pro Ala Leu Leu Leu Leu 1 5 10 15

Leu Pro Leu Leu Ala Pro Leu Leu Gly Thr Gly Ala Pro Ala Glu Leu 20 25 30

Arg Val Arg Leu Pro Asp Gly Gln Val Thr Glu Glu Ser Leu 35 40 45

Gln Ala Asp Ser Asp Ala Asp Ser Ile Ser Leu Glu Leu Arg Lys Pro
50 55 60

Asp Gly Thr Leu Val Ser Phe Thr Ala Asp Phe Lys Lys Asp Val Lys 65 70 75 80

Val Phe Arg Ala Leu Ile Leu Gly Glu Leu Glu Lys Gly Gln Ser Gln 85 90 95

Phe Gln Ala Leu Cys Phe Val Thr Gln Leu Gln His Asn Glu Ile Ile 100 105 110

Pro Ser Glu Ala Met Ala Lys Leu Arg Gln Lys Asn Pro Arg Ala Val 115 120 125

Arg Gln Ala Glu Glu Val Arg Gly Leu Glu His Leu His Met Asp Val 130 135 140

Ala Val Asn Phe Ser Gln Gly Ala Leu Leu Ser Pro His Leu His Asn 145 150 155 160

Val Cys Ala Glu Ala Val Asp Ala Ile Tyr Thr Arg Gln Glu Asp Val 165 170 175

Arg Phe Trp Leu Glu Gln Gly Val Asp Ser Ser Val Phe Glu Ala Leu 180 185 190

Pro Lys Ala Ser Glu Gln Ala Xaa Leu Pro Arg Cys Arg Gln Val Gly
195 200 205

Asp Arg Gly Lys Pro Cys Val Cys His Tyr Gly Leu Ser Leu Ala Trp 210 215 220

Tyr Pro Cys Met Leu Lys Tyr Cys His Ser Arg Asp Arg Pro Thr Pro 225 230 235 240

Tyr Lys Cys Gly Ile Arg Ser Cys Gln Lys Ser Tyr Ser Phe Asp Phe 245 250 255

Tyr Val Pro Gln Arg Gln Leu Cys Leu Trp Asp Glu Asp Pro Tyr Pro 260 265 270

 $G1_{Y}$ 

<210> 1290

<211> 273

<312> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (217)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1290

Met Arg Leu Pro Gly Val Pro Leu Ala Arg Pro Ala Leu Leu Leu 1 10 15

Leu Pro Leu Leu Ala Pro Leu Leu Gly Thr Gly Ala Pro Ala Glu Leu 20 25 30

Arg Val Arg Val Arg Leu Pro Asp Gly Gln Val Thr Glu Glu Ser Leu 35 40 45

Gln Ala Asp Ser Asp Ala Asp Ser Ile Ser Leu Glu Leu Arg Lys Pro 50 55 60

Asp Gly Thr Leu Val Ser Phe Thr Ala Asp Phe Lys Lys Asp Val Lys 65 70 75 80

Val Phe Arg Ala Leu Ile Leu Gly Glu Leu Glu Lys Gly Gln Ser Gln 85 90 95

Phe Gln Ala Leu Cys Phe Val Thr Gln Leu Gln His Asn Glu Ile Ile 100 105 110

Pro Ser Glu Ala Met Ala Lys Leu Arg Gln Lys Asn Pro Arg Ala Val

Arg Gln Ala Glu Glu Val Arg Gly Leu Glu His Leu His Met Asp Val 130 135 140

Ala Val Asn Phe Ser Gln Gly Ala Leu Leu Ser Pro His Leu His Asn 145 150 150 160

Val Cys Ala Glu Ala Val Asp Ala Ile Tyr Thr Arg Gln Glu Asp Val 165 170 175

Arg Phe Trp Leu Glu Gln Gly Val Asp Ser Ser Val Phe Glu Ala Leu 180 185 190

Pro Lys Ala Ser Glu Gln Ala Glu Léu Pro Arg Cys Arg Gln Val Gly 195 200 205

Asp Arg Gly Lys Pro Cys Val Cys Xaa Tyr Gly Leu Ser Leu Ala Trp 210 215 220

Tyr Pro Cys Met Leu Lys Tyr Cys His Ser Arg Asp Arg Pro Thr Pro 225 230 235

Tyr Lys Cys Gly Ile Arg Ser Cys Gln Lys Ser Tyr Ser Phe Asp Phe 245 250 255

Tyr Val Pro Gln Arg Gln Leu Cys Leu Trp Asp Glu Asp Pro Tyr Pro 260 265 270

Gly

<210> 1291

<211> 934

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (225)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (596)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (852)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1291

Met Leu Ala Gly Cys Phe Leu Leu Ile Leu Gly Gln Ile Val Leu Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Pro Ala Glu Ala Arg Glu Arg Ser Arg Gly Arg Ser Ile Ser Arg Gly 20 25 30

Arg His Ala Arg Thr His Pro Gln Thr Ala Leu Leu Glu Ser Ser Cys
35 40 45

Glu Asn Lys Arg Ala Asp Leu Val Phe Ile Ile Asp Ser Ser Arg Ser 50 60

Val Asn Thr His Asp Tyr Ala Lys Val Lys Glu Phe Ile Val Asp Ile 65 70 75 80

Leu Gln Phe Leu Asp Ile Gly Pro Asp Val Thr Arg Val Gly Leu Leu 85 90 95

Gln Tyr Gly Ser Thr Val Lys Asn Glu Phe Ser Leu Lys Thr Phe Lys 100 105 110

Arg Lys Ser Glu Val Glu Arg Ala Val Lys Arg Met Arg His Leu Ser 120 Thr Gly Thr Met Thr Gly Leu Ala Ile Gln Tyr Ala Leu Asn Ile Ala 135 Phe Ser Glu Ala Glu Gly Ala Arg Pro Leu Arg Glu Asn Val Pro Arg Val Ile Met Ile Val Thr Asp Gly Arg Pro Gln Asp Ser Val Ala Glu 170 Val Ala Ala Lys Ala Arg Asp Thr Gly Ile Leu Ile Phe Ala Ile Gly 185 Val Gly Gln Val Asp Phe Asn Thr Leu Lys Ser Ile Gly Ser Glu Pro 200 His Glu Asp His Val Phe Leu Val Ala Asn Phe Ser Gln Ile Glu Thr 215 Xaa Thr Ser Val Phe Gln Lys Lys Leu Cys Thr Ala His Met Cys Ser 235 230 Thr Leu Glu His Asn Cys Ala His Phe Cys Ile Asn Ile Pro Gly Ser 245 Tyr Val Cys Arg Cys Lys Gln Gly Tyr Ile Leu Asn Ser Asp Gln Thr 265 Thr Cys Arg Ile Gln Asp Leu Cys Ala Met Glu Asp His Asn Cys Glu Gln Leu Cys Val Asn Val Pro Gly Ser Phe Val Cys Gln Cys Tyr Ser 295 Gly Tyr Ala Leu Ala Glu Asp Gly Lys Arg Cys Val Ala Val Asp Tyr Cys Ala Ser Glu Asn His Gly Cys Glu His Glu Cys Val Asn Ala Asp Gly Ser Tyr Leu Cys Gln Cys His Glu Gly Phe Ala Leu Asn Pro Asp 340 Glu Lys Thr Cys Thr Lys Ile Asp Tyr Cys Ala Ser Ser Asn His Gly 360 Cys Gln His Glu Cys Val Asn Thr Asp Asp Ser Tyr Ser Cys His Cys 375 Leu Lys Gly The Thr Leu Asn Pro Asp Lys Lys Thr Cys Arg Arg Ile Asn Tyr Cys Ala Leu Asn Lys Pro Gly Cys Glu His Glu Cys Val Asn 410 Met Glu Glu Ser Tyr Tyr Cys Arg Cys His Arg Gly Tyr Thr Leu Asp

Pro Asn Gly Lys Thr Cys Ser Arg Val Asp His Cys Ala Gln Gln Asp 440 His Gly Cys Glu Gln Leu Cys Leu Asn Thr Glu Asp Ser Phe Val Cys 455 Gln Cys Ser Glu Gly Phe Leu Ile Asn Glu Asp Leu Lys Thr Cys Ser Arg Val Asp Tyr Cys Leu Leu Ser Asp His Gly Cys Glu Tyr Ser Cys 490 485 Val Asn Met Asp Arg Ser Phe Ala Cys Gln Cys Pro Glu Gly His Val 500 Leu Arg Ser Asp Gly Lys Thr Cys Ala Lys Leu Asp Ser Cys Ala Leu 520 Gly Asp His Gly Cys Glu His Ser Cys Val Ser Ser Glu Asp Ser Phe 535 Val Cys Gln Cys Phe Glu Gly Tyr Ile Leu Arg Glu Asp Gly Lys Thr 550 Cys Arg Arg Lys Asp Val Cys Gln Ala Ile Asp His Gly Cys Glu His Ile Cys Val Asn Ser Asp Asp Ser Tyr Thr Cys Glu Cys Leu Glu Gly , 585 Phe Arg Leu Xaa Glu Asp Gly Lys Arg Cys Arg Arg Lys Asp Val Cys 595 600 605 Lys Ser Thr His His Gly Cys Glu His Ile Cys Val Asn Asn Gly Asn Ser Tyr Ile Cys Lys Cys Ser Glu Gly Phe Val Leu Ala Glu Asp Gly 630 Arg Arg Cys Lys Lys Cys Thr Glu Gly Pro Ile Asp Leu Val Phe Val Ile Asp Gly Ser Lys Ser Leu Gly Glu Glu Asn Phe Glu Val Val Lys 665 Gln Phe Val Thr Gly Ile Ile Asp Ser Leu Thr Ile Ser Pro Lys Ala Ala Arg Val Gly Leu Leu Gln Tyr Ser Thr Gln Val His Thr Glu Phe 695 Thr Leu Arg Asn Phe Asn Ser Ala Lys Asp Met Lys Lys Ala Val Ala His Met Lys Tyr Met Gly Lys Gly Ser Met Thr Gly Leu Ala Leu Lys 730 His Met Phe Glu Arg Ser Phe Thr Gln Gly Glu Gly Ala Arg Pro Leu 745 740

Ser Thr Arg Val Pro Arg Ala Ala Ile Val Phe Thr Asp Gly Arg Ala 755 760 765

Gln Asp Asp Val Ser Glu Trp Ala Ser Lys Ala Lys Ala Ash Gly Ile 770 775 780

Thr Met Tyr Ala Val Gly Val Gly Lys Ala Ile Glu Glu Glu Leu Gln 785 790 795 800

Glu Ile Ala Ser Glu Pro Thr Asn Lys His Leu Phe Tyr Ala Glu Asp 805 810 815

Phe Ser Thr Met Asp Glu Ile Ser Glu Lys Leu Lys Lys Gly Ile Cys 820 825 830

Glu Ala Leu Glu Asp Ser Asp Gly Arg Gln Asp Ser Pro Ala Gly Glu 835 840 845

Leu Pro Lys Xaa Val Gln Gln Pro Thr Val Gln His Arg Tyr Leu Phe 850 860

Glu Glu Asp Asn Leu Leu Arg Ser Thr Gln Lys Leu Ser His Ser Thr 865 870 875 880

Lys Pro Ser Gly Ser Pro Leu Glu Glu Lys His Asp Gln Cys Lys Cys 885 890 895

Glu Asn Leu Ile Met Phe Gln Asn Leu Ala Asn Glu Glu Val Arg Lys  $900 \hspace{1.5cm} 905 \hspace{1.5cm} 910$ 

Leu Thr Gln Arg Leu Glu Glu Met Thr Gln Arg Met Glu Ala Leu Glu 915 920 925

Asn Arg Leu Arg Tyr Arg

<210> 1292

<211> 794

<212> PRT

<213> Homo sapiens

<400> 1292

Met Leu Ala Gly Cys Phe Leu Leu Ile Leu Gly Gln Ile Val Leu Leu 1 5 10 15

Pro Ala Glu Ala Arg Glu Arg Ser Arg Gly Arg Ser Ile Ser Arg Gly
20 25 30

Arg His Ala Arg Thr His Pro Gln Thr Ala Leu Leu Glu Ser Ser Cys  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Glu Asn Lys Arg Ala Asp Leu Val Phe Ile Ile Asp Ser Ser Arg Ser 50 55 60

Val Asn Thr His Asp Tyr Ala Lys Val Lys Glu Phe Ile Val Asp Ile 65 70 75 80

Leu Gln Fhe Leu Asp Ile Gly Pro Asp Val Thr Arg Val Gly Leu Leu

|     |            |            |            | 85  |     |            |            |            | 90   |     |            |            |            | 95  |     |
|-----|------------|------------|------------|-----|-----|------------|------------|------------|------|-----|------------|------------|------------|-----|-----|
| Gln | Tyr        | Gly        | Ser<br>100 | Thr | Val | Lys        | Asn        | Glu<br>105 | Phe. | Ser | Leu        | Lys        | Thr<br>110 | Phe | Lys |
| Arg | Lys        | Ser<br>115 | Glu        | Val | Glu | Arg        | Ala<br>120 | Val        | Lys  | Arg | Met        | Arg<br>125 | His        | Leu | Ser |
| Thr | Gly<br>130 | Thr        | Met        | Thr | Gly | Leu<br>135 | Ala        | Ile        | Gln  | Туr | Ala<br>140 | Leu        | Asn        | Ile | Ala |

Phe Ser Glu Ala Glu Gly Ala Arg Pro Leu Arg Glu Asn Val Pro Arg 145 150 155 160

Val Ile Met Ile Val Thr Asp Gly Arg Pro Gln Asp Ser Val Ala Glu  $\cdot$  165  $\,$  170  $\,$  175

Val Ala Ala Lys Ala Arg Asp Thr Gly Ile Leu Ile Phe Ala Ile Gly 180 185 190

Val Gly Gln Val Asp Phe Asn Thr Leu Lys Ser Ile Gly Ser Glu Pro 195 200 205

His Glu Asp His Val Phe Leu Val Ala Asn Phe Ser Gln Ile Glu Thr 210 215 220 .

Leu Thr Ser Val Phe Gln Lys Lys Leu Cys Thr Ala His Met Cys Ser 225 230 235 240

Thr Leu Glu His Asn Cys Ala His Phe Cys Ile Asn Ile Pro Gly Ser 245 250 255

Tyr Val Cys Arg Cys Lys Gln Gly Tyr Ile Leu Asn Ser Asp Gln Thr 260 265 270

Thr Cys Arg Ile Gln Asp Leu Cys Ala Met Glu Asp His Asn Cys Glu 275 280 285

Gln Leu Cys Val Asn Val Pro Gly Ser Phe Val Cys Gln Cys Tyr Ser 290 295 300

Gly Tyr Ala Leu Ala Glu Asp Gly Lys Arg Cys Val Ala Val Asp Tyr 305 310 315 320

Cys Ala Ser Glu Asn His Gly Cys Glu His Glu Cys Val Asn Ala Asp 325 330 335

Gly Ser Tyr Leu Cys Gln Cys His Glu Gly Phe Ala Leu Asn Pro Asp 340 345 350

Glu Lys Thr Cys Thr Lys Ile Asp Tyr Cys Ala Ser Ser Asn His Gly 355 360 365

Cys Gln His Glu Cys Val Asn Thr Asp Asp Ser Tyr Ser Cys His Cys 370 375 380

Leu Lys Gly Phe Thr Leu Asn Pro Asp Lys Lys Thr Cys Arg Arg Ile 385 390 395 400

Asn Tyr Cys Ala Leu Asn Lys Pro Gly Cys Glu His Glu Cys Val Asn

| WO         | 01/7       | 13/          |            |            |            |            |              |            |            |            |            |            |            | r          | (1/(       |
|------------|------------|--------------|------------|------------|------------|------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|
|            |            |              |            | 405        |            |            |              |            | 410        |            |            |            |            | 415        |            |
| Met        | Glu        | Glu          | Ser<br>420 | Tyr        | Tyr        | Cys        | Arg          | Cys<br>425 | His        | Arg        | Gly        | Tyr        | Thr<br>430 | Leu        | Asp        |
| Pro        | Asn        | Gly<br>435   | Lys        | Thr        | Суѕ        | Ser        | Arg<br>440   | Val        | Asp        | His        | Cys        | Ala<br>445 | Gln        | Gln        | Asp        |
| His        | Gly<br>450 | Cys          | Glu        | Gln        | Leu        | Cys<br>455 | Leu          | Asn        | Thr        | Glu        | Asp<br>460 | Ser        | Phe        | Val        | Cys        |
| Gln<br>465 | Суѕ        | Ser          | Glu        | Gly        | Phe<br>470 | Leu        | Ile          | Asn        | Glu        | Asp<br>475 | Leu        | Lys        | Thr        | Cys        | Ser<br>480 |
| Arg        | Val        | Asp          | Tyr        | Cys<br>485 | Leu        | Leu        | Ser          | Asp        | His<br>490 | Gly        | Cys        | Glu        | Tyr        | Ser<br>495 | Cys        |
| Val        | Asn        | Met          | Asp<br>500 | Arg        | Ser        | Phe        | Ala          | Cys<br>505 | Gln        | Суѕ        | Pro        | Glu        | Gly<br>510 | His        | Val        |
| Leu        | Arg        | Ser<br>515   | Asp        | Gly        | Lys        | Thr        | Cys<br>520   | Ala        | Lys        | Leu        | Asp        | Ser<br>525 | Cys        | Ala        | Leu        |
| Gly        | Asp<br>530 | His          | Gly        | Cys        | Glu        | His<br>535 | Ser          | Суѕ        | Val        | Ser        | Ser<br>540 | Glu        | Asp        | Ser        | Phe        |
| Val<br>545 |            | Gln          | Cys        | Phe        | Glu<br>550 |            | Tyr          | Ile        | Leu        | Arg<br>555 | Glu        | Asp        | Gly        | Lys        | Thr<br>560 |
| Cys        | Arg        | Arg          | Lys        | Asp<br>565 |            | Cys        | Gln          | Ala        | Ile<br>570 |            | His        | Gly        | Cys        | Glu<br>575 |            |
| Ile        | Cys        | Val          | Asn<br>580 |            | Asp        | Asp        | Ser          | Tyr<br>585 |            | Cys        | Glu        | Суѕ        | Leu<br>590 | -Glu       | Gly        |
| Phe        | Arg        | Leu<br>595   |            | Glu        | Asp        | Gly        | 600          |            | Cys        | Arg        | Arg        | Lys<br>605 |            | Val        | Cys        |
| Lys        | Ser<br>610 |              | His        | His        | Gly        | Cys<br>615 | Glu          | His        | Ile        | Cys        | Vạl<br>620 |            | Asn        | Gly        | Asn        |
| Ser<br>625 |            | lle          | Cys        | Lys        | 630        |            | Glu          | . Gly      | Phe        | Val<br>635 |            | Ala        | . Glu      | Asp        | 640        |
| Arg        | Arg        | г Суз        | Lys        | 645        |            | : Thr      | · Glu        | Gly        | Pro<br>650 |            | Asp        | Leu        | val        | Phe<br>655 |            |
| Ile        | Asp        | Gly          | Ser<br>660 |            | : Ser      | Leu        | ı Gly        | Glu<br>665 |            | Asn        | Phe        | e Glu      | Val<br>670 |            | . Lys      |
| Glr        | Phe        | e Val<br>675 |            | Gly        | r Ile      | e Ile      | 8 Asp<br>680 |            | . Leu      | ı Thr      | · Ile      | Ser<br>685 |            | Lys        | : Ala      |
| Ala        | Arg<br>690 |              | . Gly      | r Leu      | : Lev      | 695        | туг<br>5     | : Ser      | Thr        | Glr        | Val<br>700 |            | : Thr      | Glu        | ı Phe      |

His Met Lys Tyr Met Gly Lys Gly Ser Met Thr Gly Leu Ala Leu Lys  $754\,$ 

Thr Leu Arg Asn Phe Asn Ser Ala Lys Asp Met Lys Lys Ala Val Ala 705 710 715 720

730

725

His Met Phe Glu Arg Ser Phe Thr Gln Gly Glu Gly Ala Arg Pro Leu 740 745 750

Ser Thr Arg Val Pro Arg Ala Ala Ile Val Phe Thr Asp Gly Arg Ala 755 760 765

Gln Asp Asp Val Ser Glu Trp Ala Ser Lys Ala Arg Pro Trp Tyr His
770 780

Tyr Val Cys Cys Trp Gly Arg Lys Ser His 785 790

<210> 1293

<211> 39

<212> PRT

<213> Homo sapiens

<400> 1293

Met Arg Arg Pro Ala Ala Val Pro Leu Leu Leu Leu Cys Phe Gly
1 5 10 15

Ser Gln Arg Ala Lys Ala Ala Thr Ala Cys Gly Arg Pro Arg Met Leu 20 25 30

Asn Arg Met Val Gly Gly Gln 35

<210> 1294

<211> 290

<212> PRT

<213> Homo sapiens

<400> 1294

Met Arg Arg Pro Ala Ala Val Pro Leu Leu Leu Leu Cys Phe Gly
1 5 10 15

Ser Gln Arg Ala Lys Ala Ala Thr Ala Cys Gly Arg Pro Arg Met Leu 20 25 30

Asn Arg Met Val Gly Gly Gln Asp Thr Gln Glu Gly Glu Trp Pro Trp 35 40 45

Gln Val Ser Ile Gln Arg Asn Gly Ser His Phe Cys Gly Gly Ser Leu 50 55 60

Ile Ala Glu Gln Trp Val Leu Thr Ala Ala His Cys Phe Arg Asn Thr 65 70 75 80

Ser Glu Thr Ser Leu Tyr Gln Val Leu Leu Gly Ala Arg Gln Leu Val 85 90 95

Gln Pro Gly Pro His Ala Met Tyr Ala Arg Val Arg Gln Val Glu Ser 100 105 110

Asn Pro Leu Tyr Gln Gly Thr Ala Ser Ser Ala Asp Val Ala Leu Val 115 Glu Leu Glu Ala Pro Val Fro Phe Thr Asn Tyr Ile Leu Pro Val Cys 135 130 Leu Pro Asp Pro Ser Val Ile Phe Glu Thr Gly Met Asn Cys Trp Val 150 155 Thr Gly Trp Gly Ser Pro Ser Glu Glu Asp Leu Leu Pro Glu Pro Arg 165 170 Ile Leu Gln Lys Leu Ala Val Pro Ile Ile Asp Thr Pro Lys Cys Asn 185 Leu Leu Tyr Ser Lys Asp Thr Glu Phe Gly Tyr Gln Pro Lys Thr Ile 200 Lys Asn Asp Met Leu Cys Ala Gly Phe Glu Glu Gly Lys Lys Asp Ala Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Cys Leu Val Gly Gln Ser 230 235 Trp Leu Gln Ala Gly Val Ile Ser Trp Gly Glu Gly Cys Ala Arg Gln 245 - Asn Arg Pro Gly Val Tyr Ile Arg Val Thr Ala His His Asn Trp Ile 265 His Arg Ile Ile Pro Lys Leu Gln Phe Gln Pro Ala Arg Leu Gly Gly Gln Lys 290 <210> 1295 <211> 144 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (77) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (141)

<223> Xaa equals any of the naturally occurring L-amino acids

Met beu beu Sly Val Gly Leu Val Val Leu Ala Leu Ile Ala Gly Trp

<400> 1295

1 5 10 15

Val Leu Gln Gln Ala Asn Arg Ser Ala Gln Gln Leu Thr Ala Thr Gly
20 25 30

Gln Ser Leu Met Gln Ser Gln Arg Leu Ala Lys Ser Val Ser Gln Ala 35 40 45

Leu Val Gly Ser Pro Gln Ala Phe Pro Asp Val Val Glu Ser Ser Gly 50 55 60

Val Leu Ala Arg Asn Val Arg Ala Leu Asn Gly Gly Xaa Asn Glu Leu 65 70 75 80

Asp Val Gln Ala Leu Gly Glu Pro Phe Arg Pro Glu Leu Asp Ala Ile 85 90 95

Thr Pro Leu Val Glu Arg Ala Glu Arg Asn Ala Gly Val Val Met Gly 100 105 110

Gln Gln Lys Ile Leu Thr Gln Val Gly Xaa Ala Leu Arg Thr Ile Lys 115 120 125

Pro Pro Val Leu Gly Pro Cys Trp Arg Ser Arg Arg Xaa Ser Ser Ser 130 135 140

<210> 1296

<211> 187

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1296

Thr Ser Arg Val Trp Cys Pro His Val Arg Arg Ash Arg Pro Ser Xaa 1 5 10 15

Gln Thr Ala Glu Pro Cys Ala Val Asn Trp Lys Ala Cys Lys Ala Thr 20 25 30

Val Gly Thr Ile Gly His Gly Cys Gly Pro Ala Ile Ala Leu Ala Val 35 40 45

Ala Gly Ile Phe Val Leu Cys Gly Val Gly Ile Ser Arg Val Gln 50 55 60

Leu Leu Asp Ser Arg Ser Arg Xaa Ala Thr Ala Glu Ala Gln Gln Arg

WO θ1/77137 PC1/U801/11988

65 70 75 80

Asp Ala Lys Arg Gln Glu Gln Glu Ala Lys Arg Ile Asn Asp Ala Asn 85 90 95

Gln Ala Ala Ile Leu Arg Leu Met Asn Glu Leu Gln Ser Val Ala Glu 100 105 110

Gly Asp Leu Thr Gln Glu Ala Thr Val Thr Glu Asp Ile Thr Gly Ala 115 120 125

Ile Ala Asp Ser Val Asn Tyr Thr Val Glu Glu Ser Ala Ser Trp Trp 130 135 140

Ala Thr Cys Arg Thr Pro Arg Pro Gly Trp Pro Arg Pro Pro Arg Arg 145 150 155 160

Trp Thr Ala Pro Leu Arg Asn Cys Trp Arg Leu Arg Pro Ser Ser Cys 165 170 175

Val Lys Ser Val Lys Arg Ala Val Arg Cys Ser 180 185

<210> 1297

<211> 346

<212> PRT

<213> Homo sapiens

<400> 1297

Met Leu Leu Gly Val Gly Leu Val Val Leu Ala Leu Ile Ala Gly Trp

1 5 10 15

Val Leu Gln Gln Ala Asn Arg Ser Ala Gln Gln Leu Thr Ala Thr Gly 20 25 30

Gln Ser Leu Met Gln Ser Gln Arg Leu Ala Lys Ser Val Ser Gln Ala 35 40 45

Leu Val Gly Ser Pro Gln Ala Phe Pro Asp Val Val Glu Ser Ser Gly 50 55 60

Val Leu Ala Arg Asn Val Arg Ala Leu Asn Gly Gly Asp Asn Glu Leu 65 70 75 80

Asp Val Gln Ala Leu Gly Glu Pro Phe Arg Pro Glu Leu Asp Ala Ile 85 90 95

Thr Pro Leu Val Glu Arg Ala Glu Arg Asn Ala Gly Val Val Met Gly
100 105 110

Gln Gln Lys Ile Leu Thr Gln Val Gly Asp Ala Leu Arg Thr Ile Asn 115 120 125

Arg Gln Ser Ser Asp Leu Leu Glu Ile Ala Glu Thr Val Ser Ser Leu 130 135 140

Lys Leu Gln Gln Asn Ala Pro Ala Ser Glu Ile Ser Ala Ala Gly Gln 145 150 155 160

Leu Val Met Leu Thr Gln Arg Ile Gly Lys Ser Ala Asn Glu Phe Gln \$165\$ \$170\$ \$175\$

Thr Thr Glu Gly Val Ser Pro Glu Ala Val Phe Leu Leu Gly Lys Asp 180 185 190

Leu Asn Ser Phe Lys Glu Ile Ala Arg Gly Met Leu Asp Gly Ser Ala 195 200 205

Asp Leu Arg Leu Ala Ala Thr Arg Asp Ala Gln Thr Arg Glu Gln Leu 210 215 220

Glu Ser Leu Ile Lys Leu Tyr Glu Gln Thr Arg Thr Gln Ala Gly Ala 225 230 235 240

Ile Leu Gly Asn Leu Gln Gly Leu Val Ser Ala Arg Glu Ala Gln Ser 245 250 255

Ala Ile Leu Ala Asp Ser Glu Pro Leu Arg Arg Gln Leu Glu Gly Leu 260 265 . 270

Gln Ser Lys Leu Ser Ala Gln Ser Gly Met Gly Ala Ala Ser Ser Leu 275 280 285

Arg Ser Pro Ser Pro Val Ser Ser Cys Cys Ala Ala Trp Val Phe 290 295 300

Arg Ala Cys Ser Cys Trp Thr Ala Ala Ala Lys Pro Arg Pro Lys 305 310 . 315 320

His Ser Ser Val Met Pro Ser Ala Arg Asn Arg Lys Pro Ser Ala Ser 325 330 335

Thr Thr Pro Thr Arg Arg Pro Phe Cys Asp 345

<210> 1298

<211> 29

<212> PRT

<213> Homo sapiens

<400> 1298

Met His Leu Val Gly Gly Thr Leu Leu Val Leu Ala Pro Arg Gly Ala 1 5 10 15

Val Leu Pro Leu Ser Ser Gln Ser Met Pro Phe Leu Gln
20 25

<210> 1299

<211> 29

<212> PRT

<213> Homo sapiens

<400> 1299

Met His Leu Val Gly Gly Thr Leu Leu Val Leu Ala Pro Arg Gly Ala

1 5 10 15

Val Leu Pro Leu Ser Ser Gln Ser Met Pro Phe Leu Gln 20 25

<210> 1300

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1300

Met Gly Thr Lys Ala Gln Val Glu Arg Lys Leu Leu Cys Leu Phe Ile 1 5 10

Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro Val Lys Leu 35 40 45

Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe 50 55 60

Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr 65 70 75 80

Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr Phe  $85 \\ 90 \\ 95$ 

Lys Ser Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met Val Ser 100 105 110

Glu Glu Gly Gly Asn Ser Tyr Gly Glu Val Lys Val Lys Leu Ile Val 115 120 125

Leu Val Pro Pro Ser Lys Pro Thr Val Asn Ile Pro Ser Ser Ala Thr 130 135 140

Ile Gly Asn Arg Ala Val Leu Thr Cys Ser Glu Gln Asp Gly Ser Pro 145 150 155 160

Pro Ser Glu Tyr Thr Trp Phe Lys Asp Gly Ile Val Met Pro Thr Asn 165 170 175

Pro Lys Ser Thr Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro 180 185 190

Thr Thr Gly Glu Leu Val Phe Asp Pro Leu Ser Ala Ser Asp Thr Gly 195 200 205

Glu Tyr Ser Cys Glu Ala Arg Asn Gly Tyr Gly Thr Pro Met Thr Ser 210 215 220

Asn Ala Val Arg Met Glu Ala Val Glu Arg Asn Val Gly Val Ile Val 225 230 235 240

Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Ile Leu Val Phe Gly 245 250 255

Ile Trp Phe Ala Tyr Ser Arg Gly His Phe Asp Arg Thr Lys Lys Gly 260 265 270

Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala Arg Ser Glu 275 280 285

Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val 290 295

<210> 1301

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1301

Met Gly Thr Lys Ala Gln Val Glu Arg Lys Leu Cys Leu Phe Ile 1 5 10 15

Leu Ala Ile Leu Cys Ser Leu Ala Leu Gly Ser Val Thr Val His
20 25 30

Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro Val Lys Leu 35 40 45

Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe 50 55 60

Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr 65 70 75 80

Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr Phe 85 90 95

Lys Ser Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met Val Ser 100 105 110

Glu Glu Gly Gly Asn Ser Tyr Gly Glu Val Lys Val Lys Leu Ile Val 115 120 125

Leu Val Pro Pro Ser Lys Pro Thr Val Asn Ile Pro Ser Ser Ala Thr
130 135 140

Ile Gly Asn Àrg Ala Val Leu Thr Cys Ser Glu Gln Asp Gly Ser Pro 145 150 155 160

Pro Ser Glu Tyr Thr Trp Phe Lys Asp Gly Ile Val Met Pro Thr Asn 165 170 175

Pro Lys Ser Thr Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro 180 185 190

Thr Thr Gly Glu Leu Val Phe Asp Pro Leu Ser Ala Ser Asp Thr Gly 195 200 205

Glu Tyr Ser Cys Glu Ala Arg Asn Gly Tyr Gly Thr Pro Met Thr Ser 210 215 220

Asn Ala Val Arg Met Glu Ala Val Glu Arg Asn Val Gly Val Ile Val 225 230 235 240

Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Ile Leu Val Phe Gly 245 250 255

Ile Trp Phe Ala Tyr Ser Arg Gly His Phe Asp Arg Thr Lys Lys Gly 260 265 270

Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala Arg Ser Glu 275 280 285

Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val 290 295

<210> 1302

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1302

Ala Arg Ala Lys Pro Glu Arg Pro Ala Gly Trp Ala Glu Ser Val Leu 1 5 10 15

Glu Glu Asp Ala Ser Glu Leu Glu Pro Ala Phe Ser Arg Thr Val Gly 20 25 30

Thr Ile Gln His Cys Leu His Leu Thr Ser Val Tyr Thr His Phe Leu 35 40 45

Pro Gln Arg Gly Arg Pro Glu Val Thr Thr Met Pro Leu Gly Leu Gly 50 55 60

Met Thr Val Asp Tyr Ile Phe Phe Ser Ala Glu Ser Cys Glu Asn Gly 55 70 75 80

Asn Arg Thr Asp His Arg Leu Tyr Arg Asp Gly Thr Leu Lys Leu Leu 85 90 95

Leu Pro Asn Pro Phe Cys Ser Ser Asp His Leu Cys Leu Leu Ala Ser 115 120 125

Phe Gly Met Glu Val Thr Ala Pro 130 135

<210> 1303

<211> 100

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (83)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (92)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (95)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1303

Met Ile Ala Ser Cys Leu Cys Tyr Leu Leu Leu Pro Ala Thr Arg Leu
1 5 10 15

Phe Arg Ala Leu Ser Xaa Ala Phe Phe Thr Cys Arg Lys Asn Val Leu 20 25 30

Leu Ala Asn Ser Ser Ser Pro Gln Val Glu Gly Asp Phe Ala Met Ala 35 40 45

Pro Arg Gly Pro Glu Gln Glu Glu Cys Glu Gly Leu Leu Gln Gln Trp 50 55 60

Arg Glu Glu Gly Leu Ser Gln Val Leu Ser Thr Ala Ser Glu Gly Pro 65 70 75 80

Leu Ile Xaa Lys Gly Leu Ala Gln Ser Ser Leu Xaa Leu Leu Xaa Asp 85 90 95

Asn Pro Gly Glu 100

<210> 1304

<211> 670

<212> PRT

<213> Homo sapiens

<400> 1304

Met Ile Ala Ser Cys Leu Cys Tyr Leu Leu Pro Ala Thr Arg Leu
1 5 10 15

Phe Arg Ala Leu Ser Asp Ala Phe Phe Thr Cys Arg Lys Asn Val Leu 20 25 30

Leu Ala Asn Ser Ser Pro Gln Val Glu Gly Asp Phe Ala Met Ala 35 40 45

Pro Arg Gly Pro Glu Gln Glu Glu Cys Glu Gly Leu Leu Gln Gln Trp
50 55 60

Arg Glu Glu Gly Leu Ser Gln Val Leu Ser Thr Ala Ser Glu Gly Pro

| 65         |            |            |            |            | 70         |            |            |            |            | /5         |            |            |            |            | 80         |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Leu        | Ile        | Asp        | Lys        | Gly<br>85  | Leu        | Ala        | Gln        | Ser        | Ser<br>90  | Leu        | Ala        | Leu        | Leu        | Met<br>95  | Asp        |
| Asn        | Pro        | Gly        | Glu<br>100 | Glu        | Asn        | Ala        | Ala        | Ser<br>105 | Glu        | Asp        | Arg        | Trp        | Ser<br>110 | Ser        | Arg        |
| Gln        | Leu        | Ser<br>115 | Asp        | Leu        | Arg        | Ala        | Ala<br>120 | Glu        | Asn        | Leu        | Asp        | Glu<br>125 | Pro        | Phe        | Pro        |
| Glu        | Met<br>130 | Leu        | Gly        | Glu        | Glu        | Pro<br>135 | Leu        | Leu        | Glu        | Val        | Glu<br>140 | Gly        | Val        | Glu        | Gly        |
| Ser<br>145 | Met        | Trp        | Ala        | Ala        | Ile<br>150 | Pro        | Met        | Gln        | Ser        | Glu<br>155 | Pro        | Gln        | Tyr        | Ala        | Asp<br>160 |
| Cys        | Ala        | Ala        | Leu        | Pro<br>165 | Val        | Gly        | Ala        | Leu        | Ala<br>170 | Thr        | Glu        | Gln        | Trp        | Glu<br>175 | Glu        |
|            |            |            | 180        |            |            |            | Ser        | 185        |            |            |            |            | 190        |            |            |
|            |            | 195        |            |            |            |            | Phe<br>200 |            |            |            |            | 205        |            |            |            |
|            | 210        |            |            |            |            | 215        | His        |            |            |            | 220        |            |            |            |            |
| 225        |            |            |            |            | 230        |            | Ala        |            |            | 235        |            |            |            |            | 240        |
|            |            |            |            | 245        |            |            | Met        |            | 250        |            |            |            |            | 255        |            |
|            |            |            | 260        |            |            |            | Leu        | 265        |            |            |            |            | 270        |            |            |
| -          |            | 275        |            |            |            |            | Val<br>280 |            |            |            |            | 285        |            |            |            |
|            | 290        |            |            |            |            | 295        | Leu        |            |            |            | 300        |            |            |            |            |
| 305        |            |            |            |            | 310        |            | Leu        |            |            | 315        |            |            |            | _          | 320        |
|            |            |            | -          | 325        |            |            | Lys        |            | 330        |            | -          |            |            | 335        |            |
|            |            |            | 340        |            |            |            | Leu        | 345        |            |            |            |            | 350        |            |            |
|            |            | 355        |            |            |            |            | Asn<br>360 |            |            |            |            | 365        |            |            |            |
|            | 370        |            |            |            |            | 375        | Glu        |            |            |            | 380        |            |            |            |            |
| PIO        | Leu        | чys        | vai        | Ala        | Asn        | inr        | His        | 1:6        | Leu        | TYT        | ASN        | Fro        | Arg        | Arg        | GLY        |

385 390 395 400

Asp Val Lys Leu Ala Gln Met Ala Ile Leu Leu Ala Glu Val Asp Lys 405 410 415

Val Ala Arg Leu Ser Asp Gly Ser His Cys Pro Ile Ile Leu Cys Gly
420 425 430

Asp Leu Asn Ser Val Pro Asp Ser Pro Leu Tyr Asn Phe Ile Arg Asp 435 440 445

Gly Glu Leu Gln Tyr His Gly Met Pro Ala Trp Lys Val Ser Gly Gln 450 455 460

Glu Asp Phe Ser His Gln Leu Tyr Gln Arg Lys Leu Gln Ala Pro Leu 465 470 475 480

Trp Pro Ser Ser Leu Gly Ile Thr Asp Cys Cys Gln Tyr Val Thr Ser 485 490 495

Cys His Pro Lys Arg Ser Glu Arg Arg Lys Tyr Gly Arg Asp Phe Leu 500 505 510

Leu Arg Phe Arg Phe Cys Ser Ile Ala Cys Gln Arg Pro Val Gly Leu 515 520 525

Val Leu Met Glu Gly Val Thr Asp Thr Lys Pro Glu Arg Pro Ala Gly 530 535 540

Trp Ala Glu Ser Val Leu Glu Glu Asp Ala Ser Glu Leu Glu Pro Ala 545 550 560

Phe Ser Arg Thr Val Gly Thr Ile Gln His Cys Leu His Leu Thr Ser 565 570 575

Val Tyr Thr His Phe Leu Pro Gln Arg Gly Arg Pro Glu Val Thr Thr. 580 585 590

Met Pro Leu Gly Leu Gly Met Thr Val Asp Tyr Ile Phe Phe Ser Ala 595 600 605

Glu Ser Cys Glu Asn Gly Asn Arg Thr Asp His Arg Leu Tyr Arg Asp 610 615 620

Gly Thr Leu Lys Leu Leu Gly Arg Leu Ser Leu Leu Ser Glu Glu Ile 625 630 635 640

Leu Trp Ala Ala Asn Gly Leu Pro Asn Pro Phe Cys Ser Ser Asp His 645 650 655

Leu Cys Leu Leu Ala Ser Phe Gly Met Glu Val Thr Ala Pro 660 665 670

<210> 1305

<211> 228

<212> PRT

<213> Homo sapiens

<220> <221> SITE <222> (164) <223> Xaa equals any of the naturally occurring L-amino acids . <220> <021> SITE <232> (167) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (200) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (206) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (221) <223> Xaa equals any of the naturally occurring L-amino acids Met Ala Ala Ala Gly Ser Val Lys Ala Ala Leu Gln Val Ala Glu Val Leu Glu Ala Ile Val Ser Cys Cys Val Gly Pro Glu Gly Arg Gln Val Leu Cys Thr Lys Pro Thr Gly Glu Val Leu Leu Ser Arg Asn Gly Gly 40 45 35 Arg Leu Leu Glu Ala Leu His Leu Glu His Pro Ile Ala Arg Met Ile Val Asp Cys Val Ser Ser His Leu Lys Lys Thr Gly Asp Gly Ala Lys 75 70 -Thr Phe Ile Ile Phe Leu Cys His Leu Leu Arg Gly Leu His Ala Ile Thr Asp Arg Glu Lys Asp Pro Leu Met Cys Glu Asn Ile Gln Thr His Gly Arg His Trp Lys Asn Cys Ser Arg Trp Lys Phe Ile Ser Gln Ala Leu Leu Thr Phe Gln Thr Gln Ile Leu Asp Gly Ile Met Asp Gln Tyr 130 . 135 Leu Ser Arg His Phe Leu Ser Ile Phe Ser Ser Ala Lys Glu Arg Thr 150 155 145 Leu Cys Arg Xaa Ser Leu Xaa Leu Leu Leu Glu Ala Tyr Phe Cys Gly 170 165 Dys Val Gly Arg Asn Asn His Dys Phe Ile Ser Gln Leu Met Cys Asp

180 185 190

Tyr Phe Phe Lys Cys Met Thr Xaa Lys Ser Gly Ile Gly Xaa Phe Glu
195 200 205

Leu Gly Asp Asp His Phe Val Lys Leu Asn Val Gly Xaa Leu Ala Phe 210 215 220

Leu Phe Lys Phe 225

<210> 1306

<211> 170

<212> PRT

<213> Homo sapiens

<400> 1306

Met Ala Ala Gly Ser Val Lys Ala Ala Leu Gln Val Ala Glu Val 1 5 10  $\cdot$  15

Leu Glu Ala Ile Val Ser Cys Cys Val Gly Pro Glu Gly Arg Gln Val 20 25 30

Leu Cys Thr Lys Pro Thr Gly Glu Val Leu Leu Ser Arg Asn Gly Gly 35 40 45

Arg Leu Leu Glu Ala Leu His Leu Glu His Pro Ile Ala Arg Met Ile 50 55 60

Val Asp Cys Val Ser Ser His Leu Lys Lys Thr Gly Asp Gly Ala Lys 65 70 75 80

Thr Phe Ile Ile Phe Leu Cys His Leu Leu Arg Gly Leu His Ala Ile 85 90  $\cdot$  95

Thr Asp Arg Glu Lys Asp Pro Leu Met Cys Glu Asn Ile Gln Thr His
100 105 110

Gly Arg His Trp Lys Asn Cys Ser Arg Trp Lys Phe Ile Ser Gln Ala 115 120 125

Leu Leu Thr Phe Gln Thr Gln Ile Leu Asp Gly Ile Met Asp Gln Tyr 130 135 140

Leu Ser Arg His Phe Leu Ser Ile Phe Ser Ser Ala Lys Glu Arg Thr 145 150 155 160

Leu Cys Arg Ser Ser Leu Glu Ser Val Ser
165 170

<210> 1307

<211> 149

<212> PRT

<213> Homo sapiens

<220>

<D21> SITE <202> (87) <223> Xaa (

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<122> (95)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (107)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1307

Met Gly Ala Pro Leu Leu Ser Pro Gly Trp Gly Ala Gly Ala Ala Gly
1 5 10 15

Arg Arg Trp Trp Met Leu Leu Ala Pro Leu Leu Pro Ala Leu Leu Leu 20 25 30

Val Arg Pro Ala Gly Ala Leu Val Glu Gly Leu Tyr Cys Gly Thr Arg 35 40 45

Asp Cys Tyr Glu Val Leu Gly Val Ser Arg Ser Ala Gly Lys Ala Glu 50 55 60

Ile Ala Arg Ala Tyr Arg Gln Leu Ala Arg Arg Tyr His Pro Asp Arg 65 70 75 80

Tyr Arg Pro Gln Pro Gly Xaa Glu Gly Pro Gly Arg Thr Pro Xaa Ser 85 90 95

Ala Glu Glu Ala Phe Leu Leu Val Ala Thr Xaa Tyr Glu Thr Leu Lys
100 105 110

Asp Glu Glu Thr Arg Lys Asp Tyr Asp Tyr Met Leu Asp His Pro Glu 115 120 125

Glu Tyr Tyr Ser His Tyr Tyr His Tyr Tyr Ser Arg Arg Leu Ala Leu 130 140

Arg Trp Met Leu Glu 145

<210> 1308

<211> 360

<212> PRT

<213> Homo sapiens

<400> 1308

Met Gly Ala Pro Leu Leu Ser Pro Gly Trp Gly Ala Gly Ala Ala Gly
1 5 10 15

Arg Arg Trp Trp Met Leu Leu Ala Pro Leu Leu Pro Ala Leu Leu Leu 20 25 30

Val Arg Pro Ala Gly Ala Leu Val Glu Gly Leu Tyr Cys Gly Thr Arg

| 35 | 40 | 45 |
|----|----|----|
|    |    |    |

Asp Cys Tyr Glu Val Leu Gly Val Ser Arg Ser Ala Gly Lys Ala Glu 50 0

Ile Ala Arg Ala Tyr Arg Gln Leu Ala Arg Arg Tyr His Pro Asp Arg 65 70 75 80

Tyr Arg Pro Gln Pro Gly Asp Glu Gly Pro Gly Arg Thr Pro Gln Ser 85 90 95

Ala Glu Glu Ala Phe Leu Leu Val Ala Thr Ala Tyr Glu Thr Leu Lys
100 105 110

Asp Glu Glu Thr Arg Lys Asp Tyr Asp Tyr Met Leu Asp His Pro Glu 115 120 125

Glu Tyr Tyr Ser His Tyr Tyr His Tyr Tyr Ser Arg Arg Leu Ala Pro 130 135 140

Lys Val Asp Val Arg Val Val Ile Leu Val Ser Val Cys Ala Ile Ser 145 150 155 160

Val Phe Gln Phe Phe Ser Trp Trp Asn Ser Tyr Asn Lys Ala Ile Ser 165 170 175

Tyr Leu Ala Thr Val Pro Lys Tyr Arg Ile Gln Ala Thr Glu Ile Ala 180 185 190

Lys Gln Gln Gly Leu Leu Lys Lys Ala Lys Glu Lys Gly Lys Asn Lys
195 200 205

Lys Ser Lys Glu Glu Ile Arg Asp Glu Glu Glu Asn Ile Ile Lys Asn 210 215 220

Ile Ile Lys Ser Lys Ile Asp Ile Lys Gly Gly Tyr Gln Lys Pro Gln 225 230 235 240

Ile Cys Asp Leu Leu Phe Gln Ile Ile Leu Ala Pro Phe His Leu 245 250 255

Cys Ser Tyr Ile Val Trp Tyr Cys Arg Trp Ile Tyr Asn Phe Asn Ile 260 265 270

Lys Gly Lys Glu Tyr Gly Glu Glu Glu Arg Leu Tyr Ile Ile Arg Lys 275 280 285

Ser Met Lys Met Ser Lys Ser Gln Phe Asp Ser Leu Glu Asp His Gln 290 295 300

Lys Glu Thr Phe Leu Lys Arg Glu Leu Trp Ile Lys Glu Asn Tyr Glu 305 310 315 320

Val Tyr Lys Glu Glu Glu Glu Glu Leu Lys Lys Lys Leu Ala Asn 325 . 330 335

Asp Pro Arg Trp Lys Arg Tyr Arg Arg Trp Met Lys Asn Glu Gly Pro 340 345 350

Gly Arg Leu Thr Phe Val Asp Asp

WO 01/77137

355 360

<210> 1309

<211> 128

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (122)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1309

Met Glu Ser His Leu Ser Thr Trp Pro Cys His Pro Ser Cys Cys Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

PCT/US01/11988

Phe Leu Ile Leu Leu Phe Pro Ser His Pro Thr Ser Met Thr Lys Ser 20 25 30

Lys Ala Arg Leu Pro His Leu Glu Asn Cys Ser Gln Asn Asp Thr Ser 35 40 45

Lys Pro Leu Gly Gln Ala Arg Pro Pro Ser Ser Pro Thr Arg Thr Thr 50 55 60

Asp Leu Thr Thr Gly Pro Thr Ser Ser Pro Ala Pro Leu Gly Ile Leu 65 70 75 80

Glu Glu Lys Ala Val Phe Val Ala Arg Ala Gln Val Gly Asn Leu Gly
100 105 110

Leu Val Phe Arg Lys Ala Arg Gly Ser Xaa Phe Pro Thr Leu Gly Arg 115 120 125

<210> 1310

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1310

Met Glu Ser His Leu Ser Thr Trp Pro Cys His Pro Ser Cys Cys Leu 1 5 10 15

Phe Leu Ile Leu Leu Phe Pro Ser His Pro Thr Ser Met Thr Lys Ser 20 25 30

Lys Ala Arg Leu Pro His Leu Glu Asn Cys Ser Gln Asn Asp Thr Ser 35 40 45

Lys Pro Leu Gly Gln Ala Arg Pro Pro Ser Ser Pro Thr Arg Thr Thr

50 55 60

Asp Leu Thr Thr Gly Pro Thr Ser Ser Pro Ala Pro Leu Gly Ile Leu 65 70 75 80

His Thr Ala Val Arg Val Thr His Leu His Thr Leu Thr Leu Met Gly 85 90 95

Glu Glu Lys Ala Val Phe Val Ala Arg Ala Gl<br/>n Val Gly Thr Leu Ala 100 \$105\$ 110

<210> 1311

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1311

Met Phe Val Ser Val Thr Ala Phe Phe Phe Ser Leu Leu Phe Leu Gly
1 5 10 15

Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala Asn Trp Asn Phe  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe Tyr Phe Gly Ala 35 40 45

Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp Leu His Cys Asn 50 55 60

Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn Gln Tyr Asn Ile
65 70 75 80

Asn Val Ala Ala Ser Ile Phe Ala Phe Met Thr Thr Ala Cys Tyr Gly 85 90 95

Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro 100 105

<210> 1312

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1312

Asn His Ile Gln His Lys Asn Tyr Phe Trp Leu Asn Ser Thr Glu Lys

1 5 10 15

Tyr Phe Asn Leu Pro Val Glu Ile Leu Val Met Glu Arg Cys Gln Thr

Val Leu Asn Gly Arg Thr Ser Lys Ser Glu Ala Thr Val Pro Thr Thr 35 40 45

Arg Gly Leu Leu Tyr Cys Ser Thr Phe Ser Ala Leu Tyr Phe Leu Ala 50 55 60

Glu Ala Ser Fro Trp Ser Ala Met Tyr Lys Leu Gly Tyr
65 70 75

<210> 1313

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1313

Met Phe Val Ser Val Thr Ala Phe Phe Phe Ser Leu Leu Phe Leu Gly
1 10 15

Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala Asn Trp Asn Phe \$20\$ \$25\$ 30

Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe Tyr Phe Gly Ala \$35\$ 40 \$45\$

Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp Leu His Cys Asn 50 60

Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn Gln Tyr Asn Ile
65 70 75 80

Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro 100 105

<210> 1314

<211> 176

<212> PRT

<213> Homo sapiens

<400> 1314

Met Ser Ala Gly Gly Ala Ser Val Pro Pro Pro Pro Asn Pro Ala Val 1 5 10 15

Ser Phe Pro Pro Pro Arg Val Thr Leu Pro Ala Gly Pro Asp Ile Leu 20 25 30

Arg Thr Tyr Ser Gly Ala Phe Val Cys Leu Glu Ile Leu Phe Gly Gly 35 40 45

Leu Val Trp Ile Leu Val Ala Ser Ser Asn Val Pro Leu Pro Leu Leu 50 55 60

Gln Gly Trp Val Met Phe Val Ser Val Thr Ala Phe Phe Phe Ser Leu 65 70 75 80

Leu Phe Leu Gly Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala 85 90 95

Asn Trp Asn Phe Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe 100 105 110

Tyr Phe Gly Ala Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp 115 120 125

Leu His Cys Asn Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn 130 135 140

Gln Tyr Asn Ile Asn Val Ala Ala Ser Ile Phe Ala Phe Met Thr Thr 145 150 155 160

Ala Cys Tyr Gly Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro 165 170 175

<210> 1315

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1315

Met Pro Leu Cys Ser Leu Leu Thr Cys Leu Gly Leu Asn Val Leu Phe 1 5 10 15

Leu Thr Leu Asn Glu Gly Ala Trp Tyr Ser Val Gly Ala Leu Met Ile 20 25 30

Ser Val Pro Ala Leu Leu Gly Tyr Leu Gln Glu Val Cys Arg Ala Arg 35 40 45

Leu Pro Asp Ser Glu Leu Met Arg Arg Lys Tyr His Ser Val Arg Gln 50 55 60

Glu Asp Leu Gln Arg Val Arg Leu Ser Arg Pro Glu Ala Val Ala Glu 65 70 75 80

Val Lys Ser Phe Leu Ile Gln Leu Glu Ala Phe Leu Lys Pro Pro Val 85 90 95

Leu His Met Leu Lys Pro Pro 100

<210> 1316

<211> 237

<212> PRT

<213> Homo sapiens

<400> 1316

Met Pro Leu Cys Ser Leu Leu Thr Cys Leu Gly Leu Asn Val Leu Phe 1 5 10 15

Leu Thr Leu Asn Glu Gly Ala Trp Tyr Ser Val Gly Ala Leu Met Ile

20 25 30

Ser Val Pro Ala Leu Leu Gly Tyr Leu Gln Glu Val Cys Arg Ala Arg 35 40 45

Leu Pro Asp Ser Glu Leu Met Arg Arg Lys Tyr His Ser Val Arg Gln 50 55 60

Glu Asp Leu Gln Arg Val Arg Leu Ser Arg Pro Glu Ala Val Ala Glu 65 70 75 80

Val Lys Ser Phe Leu Ile Gln Leu Glu Ala Fhe Leu Ser Arg Leu Cys 85 90 95

Cys Thr Cys Glu Ala Ala Tyr Arg Val Leu His Trp Glu Asn Pro Val 100 105 110

Val Ser Ser Gln Phe Tyr Gly Ala Leu Leu Gly Thr Val Cys Met Leu 115 120 125

Tyr Leu Leu Pro Leu Cys Trp Val Leu Thr Leu Leu Asn Ser Thr Leu 130 135 140

Phe Leu Gly Asn Val Glu Phe Phe Arg Val Val Ser Glu Tyr Arg Ala 145 150 155 160

Ser Leu Gl<br/>n Gl<br/>n Arg Met Asn Pro Lys Gl<br/>n Glu Glu His Ala Phe Glu 165 \$170\$ 175

Ser Pro Pro Pro Pro Asp Val Gly Gly Lys Asp Gly Leu Met Asp Ser 180 185 190

Thr Pro Ala Leu Thr Pro Thr Glu Asp Leu Thr Pro Gly Ser Val Glu 195 200 205

Glu Ala Glu Glu Ala Glu Pro Asp Glu Glu Phe Lys Asp Ala Ile Asp ... 210 220

Glu Asp Asp Glu Gly Ala Pro Cys Pro Ala Leu Phe Leu 225 230 235

<210> 1317

<211> 165

<212> PRT

<213> Homo sapiers

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (62)

<223> Maa equals any of the naturally occurring L-amino acids

<330>

<201> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (96)

<223> Xaa equals any of the naturally occurring L-amino acids  $\cdot\cdot$ 

<400> 1317

Met Ala Arg Leu Gly Ala Val Arg Ser His Tyr Cys Ala Leu Leu Leu 1 5 10 15

Ala Ala Leu Ala Val Cys Ala Phe Tyr Tyr Leu Gly Ser Gly Arg  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Glu Thr Phe Ser Ser Ala Thr Lys Arg Leu Lys Glu Ala Arg Ala Gly 35 40  $\cdot$  45

Ala Pro Ala Ala Pro Xaa Pro Pro Ala Leu Glu Leu Ala Xaa Gly Xaa 50 55 60

Val Ala Pro Ala Pro Gly Ala Lys Ala Lys Ser Leu Glu Gly Gly 65 70 75 80

Ala Gly Pro Val Asp Tyr His Leu Leu Met Met Phe Thr Lys Ala Xaa 85 90 95

His Asn Ala Ala Leu Gln Ala Lys Ala Arg Val Ala Leu Arg Ser Leu 100 105 110

Leu Arg Leu Ala Lys Phe Glu Ala His Glu Val Leu Asn Leu His Phe 115 120 125

Val Ser Glu Glu Ala Ser Arg Glu Val Ala Lys Gly Leu Leu Arg Glu 130 135 140

Leu Leu Pro Pro Pro Leu Ala Ser Ser Ala Arg Ser Ser Ser Thr Ile 145 150 155 160

Cys Cys Ala Asp Gly

165

<210> 1318

<211> 159

<212> PRT

<213> Homo sapiens

<400> 1318

Ala Ser Lys Arg Met Pro Ala His His Ile Leu Thr Leu Gly Gly Cys

1 10 15

Cys Thr Arg Ile Leu Leu Met Leu Thr Ser Leu Gly Val Gly Phe Arg
20 25 30

Ile Ala Ser Leu Arg Lys Asp Phe Arg Thr Asn Trp Gly Leu His Lys
35 40 45

Lys Thr Tyr Leu Ile Ile Arg Val Leu Thr Ala Cys Ile Ser Gln Leu

50 55 60

His Pro Arg Thr Pro Leu Ser Phe Ile Pro Pro Asn Gln Leu Gln Val 65 70 75 80

Thr Arg Leu Tyr Ser Glu Ser Lys Phe Val Ile Lys Glu Gln Arg Leu 85 90 95

Ala Thr Thr Arg Thr Cys Arg Arg Thr Val Gly Thr Arg Lys Thr His
100 105 110

Ser Lys Lys Pro Arg Pro Gly Thr Val Val Lys Pro Val Ile Pro Thr 115 120 125

Leu Trp Glu Thr Glu Val Gly Val Ser Ile Glu Pro Arg Arg Ser Arg 130 135 140

Ser Ala Trp Glu Thr Gln Gly Gly Pro His Arg Tyr Lys Ile Phe 145 150 155

<210> 1319

<211> 380

<212> PRT

<213> Homo sapiens

<400> 1319

Met Ala Arg Leu Gly Ala Val Arg Ser His Tyr Cys Ala Leu Leu 1 5 10 15

Ala Ala Leu Ala Val Cys Ala Phe Tyr Tyr Leu Gly Ser Gly Arg 20 25 30

Glu Thr Phe Ser Ser Ala Thr Lys Arg Leu Lys Glu Ala Arg Ala Gly 35 40 45

Ala Pro Ala Ala Pro Ser Pro Pro Ala Leu Glu Leu Ala Arg Gly Ser 50 55 60

Val Ala Pro Ala Pro Gly Ala Lys Ala Lys Ser Leu Glu Gly Gly 65 70 75 80

Ala Gly Pro Val Asp Tyr His Leu Leu Met Met Phe Thr Lys Ala Glu 85 90 95

His Asn Ala Ala Leu Gln Ala Lys Ala Arg Val Ala Leu Arg Ser Leu 100 105 110

Leu Arg Leu Ala Lys Phe Glu Ala His Glu Val Leu Asn Leu His Phe 115 120 125

Val Ser Glu Glu Ala Ser Arg Glu Val Ala Lys Gly Leu Leu Arg Glu 130 135 140

Leu Leu Pro Pro Ala Ala Gly Phe Lys Cys Lys Val Ile Phe His Asp 145 150 155 160

Val Ala Val Leu Thr Asp Lys Leu Phe Pro Ile Val Glu Ala Met Gln 165 170 175

Lys His Phe Ser Ala Gly Leu Gly Thr Tyr Tyr Ser Asp Ser Ile Phe 180 185 190

Phe Leu Ser Val Ala Met His Gln Ile Met Pro Lys Glu Ile Leu Gln 195 200 205

Ile Ile Gln Leu Asp Leu Asp Leu Lys Phe Lys Thr Asn Ile Arg Glu 210 215 220

Leu Phe Glu Glu Phe Asp Ser Phe Leu Pro Gly Ala Ile Ile Gly Ile 225 230 235 240

Ala Arg Glu Met Gln Pro Val Tyr Arg His Thr Phe Trp Gln Phe Arg 245 250 255

His Glu Asn Pro Gln Thr Arg Val Gly Gly Pro Pro Pro Glu Gly Leu 260 265 270

Pro Gly Phe Asn Ser Gly Val Met Leu Leu Asn Leu Glu Ala Met Arg 275 280 285

Gln Ser Pro Leu Tyr Ser Arg Leu Leu Glu Pro Ala Gln Val Gln Gln 290 295 300

Leu Ala Asp Lys Tyr His Phe Arg Gly His Leu Gly Asp Gln Asp Phe 305 310 315 320

Phe Thr Met Ile Gly Met Glu His Pro Lys Leu Phe His Val Leu Asp 325 330 335

Cys Thr Trp Asn Arg Gln Leu Cys Thr Trp Trp Arg Asp His Gly Tyr 340 345 350

Ser Asp Val Phe Glu Ala Tyr Phe Arg Cys Glu Gly His Val Lys Ile 355 360 365

Tyr His Gly Asn Cys Asn Thr Pro Ile Pro Glu Asp 370 375 380

<210> 1320

<211> 73

<212> PRT

<213> Homo sapiens

<400> 1320

Leu Glu Ser Tyr Ser Ser Val Arg Glu Leu Leu Val Ser Val Arg Phe
1 5 10 15

Tyr Val Val Cys Lys Val Arg Gly Ser Val Leu Phe Pro Tyr Leu Gly
20 25 30

Lys Ser Thr Ala Gly Val Glu Gly Leu Tyr Val Pro Phe Asn Val Thr 35 40 45

Val Leu Lys Asp Leu Ser Arg Glu Ser Glu Ser Phe Ala Glu Cys Asp 50 55 60

Arg Arg Leu Asn Asn Leu Ile Cys Phe 65 70

<210> 1321

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1321

Met Ala Ala Ser Arg Trp Ala Arg Lys Ala Val Val Leu Leu Cys Ala 1 5 10 15

Ser Asp Leu Leu Leu Leu Leu Leu Leu Pro Pro Gly Ser Cys 20 25 30

Ala Ala Glu Ala Arg Pro Gly Arg Pro Thr Ser Leu Pro His Leu Pro 35 40 45

Gly Arg Arg Arg Ile Phe Ala Ile Thr Met Met Gln Thr Trp Arg 50 55 60

Val Phe Trp Ser Asn Gly Arg Lys Met Met Thr Leu Lys Lys Glu Ile 65 70 75 80

Phe Gln Ser Thr Arg Asp Leu Gln His Leu Ser Thr Ser Gln Arg 85 90 95

<210> 1322

<211> 234

<212> PRT

<213> Homo sapiens

<400> 1322

Met Ala Ala Ser Arg Trp Ala Arg Lys Ala Val Val Leu Leu Cys Ala 1 5 10 15

Ser Asp Leu Leu Leu Leu Leu Leu Leu Pro Pro Pro Gly Ser Cys 20 25 30

Ala Ala Glu Gly Ser Pro Gly Thr Pro Asp Glu Ser Thr Pro Pro Pro 35 40 45

Arg Lys Lys Lys Asp Ile Arg Asp Tyr Asn Asp Ala Asp Met Ala 50 55 60

Arg Leu Leu Glu Gln Trp Glu Lys Asp Asp Asp Ile Glu Glu Gly Asp 65 70 75 80

Leu Pro Glu His Lys Arg Pro Ser Ala Pro Val Asp Phe Ser Lys Ile 85 90 95

Asp Pro Ser Lys Pro Glu Ser Ile Leu Lys Met Thr Lys Lys Gly Lys 100 105 110

Thr Leu Met Met Phe Val Thr Val Ser Gly Ser Pro Thr Glu Lys Glu 115 120 125

Thr Glu Glu Ile Thr Ser Leu Trp Gln Gly Ser Leu Phe Asn Ala Asn 130 135 140

Tyr Asp Val Gln Arg Phe Ile Val Gly Ser Asp Arg Ala Ile Phe Met 145 150 155 160

Leu Arg Asp Gly Ser Tyr Ala Trp Glu Ile Lys Asp Phe Leu Val Gly
165 170 175

Gln Asp Arg Cys Ala Asp Val Thr Leu Glu Gly Gln Val Tyr Pro Gly
180 185 190

Lys Gly Gly Ser Lys Glu Lys Asn Lys Thr Lys Gln Asp Lys Gly 195 200 205

Lys Lys Lys Glu Gly Asp Leu Lys Ser Arg Ser Ser Lys Glu Glu 210 . 215 . 220

Asn Arg Ala Gly Asn Lys Arg Glu Asp Leu 225 230

<210> 1323

<211> 15

<212> PRT

<213> Homo sapiens

<400> 1323

Asn Ala Thr Lys Ser Gln Pro Cys Leu Ser Ser Leu Leu Leu Phe 1 5 10 15

<210> 1324

<211> 62

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1324

Lys Tyr Xaa Lys His Pro Ser Lys Ser Phe Glu Leu Thr Leu Val Leu 1 5 10 15

Arg Lys Leu Ser Leu His Asn Gln Pro Pro Gly Lys Thr Glu Cys His 20 25 30

Leu Leu Lys Ser Lys Cys Cys Val Ile Ile Thr Leu Gln Thr Lys Trp
35 40 45

Arg Tyr Tyr Leu Phe Cys Lys Gln Gln Thr Lys Gln Asn Ser 50 55 60

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<210> 1325
k211 - 15
<212> PRT
<213> Homo sapiens
<400> 1325
Asn Ala Thr Lys Ser Gln Pro Cys Leu Ser Ser Leu Leu Leu Phe
                                     1.0
<210> 1326
<211> 228
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring b-amino acids
<220>
<221> SITE
<222> (205)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (209)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (214)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1326
Met Val Pro Asn Trp Ile Gln Gly Arg Trp Asp Val Leu Leu Cys Val
                                                          15
                                      10
Leu Thr Val Gly Val Leu Pro Ser Ile Gly Ser Arg Gly Gly Trp Phe
Gly Thr Gln Val Pro Cys Leu Ile Pro Gly Ala Leu Ala Ser Leu His
                              40
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Arg Gly Thr Ala Leu Gln Leu Ser Tyr Pro Phe Ser Met Ala Gly Arg 50 55 60

Thr Ala Glu Arg Pro Cys Ser Met Thr Asn His Ser Phe His Leu Leu 65 70 75 80

Ser Ile Tyr Trp Glu Leu Gly Thr Val Leu Ser Xaa Lys Arg Val Leu 85 90 95

Thr His Leu Leu Gln Gln Pro Gly Lys Ala Gly Ser Ser Val Ser Pro 100 105 110

Cys Ser Lys Leu Gly Asp Leu Glu His Arg Arg Ser Ser Ala Trp Leu 115 120 125

Lys Ala His Ser Ser Xaa Val Gln Ile Leu Cys Pro Ser Trp His Pro 130 135 140

Ser Leu Gly Gly Ser Gly Val Gly Ser Leu Gln Ser Val Pro Gly Gly 145 150 155 160

Trp Met Thr Lys Leu Gln Pro Ser Arg Xaa Pro Thr Ile Ser Ile Ala 165 170 175

Gln Trp Ser Gln Lys Glu Thr Asp His Phe Thr Asp Gln Arg Asn Lys 180 185 190

Gly Ala Xaa Leu Leu Asn Pro Gly Ala Ser Asp Arg Xaa Lys Pro Glu 195 200 205

Xaa Arg Thr Lys Lys Xaa Pro Val Asn Ser Glu Pro Gly Glu Thr Leu 210 215 220

Pro Phe Thr Asn 225

<210> 1327

<211> 84

<212> PRT

<213> Homo sapiens

<400> 1327

Asp Asn Phe Leu Leu Gly Val Ala Trp Phe Phe Arg Gly Arg Gly Ser  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ala His Val Gly Val Val Ser Arg Gln Lys Gln Trp Glu Glu Gly Thr 20 25 30

Ala Lys His Ala Ala Trp Asp Tyr Gly Cys Pro Gln Ser Cys Ser Phe 35 40 45

Ser Lys Gly Val Phe Cys Leu Phe Leu Arg Gln Gly His Thr Leu Ser 50 55 60

Pro Arg Met Glu Cys Ser Gly Pro Ile Leu Ala His Cys Asn Leu Glu 65 70 75 80

Leu Leu Gly Ser

<210> 1328

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1328

Met Val Pro Asn Trp Ile Gln Gly Arg Trp Asp Val Leu Leu Cys Val 1 5 10 15

Leu Thr Val Gly Val Leu Pro Ser Ile Gly Ser Arg Gly Gly Trp Phe 20 25 30

Gly Thr Gln Val Pro Cys Leu Ile Pro Gly Ala Leu Ala Ser Leu His 35 40 45

Arg Gly Thr Ala Leu Gln Leu Ser Tyr Pro Phe Ser Met Ala Gly Arg 50 55 60

Thr Ala Glu Arg Pro Cys Ser Met Thr Asn His Ser Phe His Leu Leu 65 70 75 80

Ser Ile Tyr Trp Glu Leu Gly Thr Val Leu Ser Val Lys Arg Val Leu 85 90 95

Thr His Leu Gln Gln Pro Gly Lys Ala Gly Ser Ser Val Ser Pro 100 105 110

Cys Ser Lys Leu Gly Asp Leu Glu His Arg Arg Ser Ser Ala Trp Leu 115 120 125

Lys Ala His Ser Ser Glu Val Gln Ile Leu Cys Pro Ser Trp His Pro 130 135 140

Ser Leu Gly Gly Ser Gly Val Gly Ser Leu Gln Ser Val Pro Gly Gly 145 150 155 160

Trp Met Thr Ser Cys Ser Leu Pro Ala Thr Pro Arg Phe Pro 165 170

<210> 1329

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1329

Met Val Pro Asn Trp Ile Gln Gly Arg Trp Asp Val Leu Leu Cys Val
1 5 10 15

Leu Thr Val Gly Val Leu Pro Ser Ile Gly Ser Arg Gly Gly Trp Phe 20 25 30

Gly Thr Gln Val Pro Cys Leu Ile Pro Gly Ala Leu Ala Ser Leu His 35 40 45

Arg Gly Thr Ala Leu Gln Leu Ser Tyr Pro Phe Ser Met Ala Gly Arg 50 55 60

Thr Ala Glu Arg Pro Cys Ser Met Thr Asn His Ser Phe His Leu Leu 65 70 75 80

Ser Ile Tyr Trp Glu Leu Gly Thr Val Leu Ser Val Lys Arg Val Leu 85 90 95

Thr His Leu Leu Gln Gln Pro Gly Lys Ala Val Leu Pro Leu Ala Pro 100 105 110

Ala Gln Ser 115

<210> 1330

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1330

Met Glu Asn Gln Met Leu Thr Cys Val Ala Ile Phe Val Leu Phe Cys

1 10 15

Phe Val Leu Phe Leu Arg Gln Gly Leu Ala Leu Ser Pro Arg Leu Glu 20 25 30

Cys Ser Gly Met Ile Arg Ala Tyr Cys Ser Leu Thr Leu Asp Phe Leu 35 40 45

Gly Ser Ser Asn Pro Xaa Thr Xaa Ala Pro Lys 50 55

<210> 1331

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1331

Met Glu Asn Gln Met Leu Thr Cys Val Ala Ile Phe Val Leu Phe Cys
1 5 10 15

Phe Val Leu Phe Leu Arg Gln Gly Leu Ala Leu Ser Pro Arg Leu Glu 20 25 30

Cys Ser Gly Met Ile Arg Ala Tyr Cys Ser Leu Thr Leu Asp Phe Leu 35 40 45

Gly Ser Ser Asn Pro Pro Thr Ser Ala Pro Lys 50

<210> 1332

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1332

Gly Ser Phe Leu Ser Pro Trp Gly Pro Ile Leu Trp Gly Leu Gly Ala 1 5 10 15

Gly Val Leu Met Gly Asp Ala Leu Gln Gly Arg Glu Gly Arg Met Gln 20 25 30

Ala Thr Val Gly Ala Gly Pro Glu Gly Ser Glu Thr Val Ala Val Gl<br/>n 35 40 45

Val Cys Val Ile Arg Glu Ala Val Val Gly Glu Glu Val Ser Asp Cys
50 60

Val Ala Pro Leu Cys Gly Val Gly Gly Gln Gly Gly Ala Ala Lys Glu 65 70 75 80

Ala Arg Lys Met Gly Gly Gly Trp Asp Gly Leu Gly Ser His Ile His 85 90 95

Val Leu Asp Phe 100

<210> 1333

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1333

Met Leu Ile Leu Gly Ser Met Phe Ser Leu Val Glu Pro Val Leu Thr

Ile Ala Ala Leu Ser Val Gln Ser Pro Phe Thr Arg Ser Ala Gln 20 25 30

Ser Ser Pro Glu Cys Ala Ala Ala Arg Arg Pro Leu Glu Ser Asp Gln 35 40 45

Gly Asp Pro Phe Thr Leu Phe Asn Val Phe Asn Ala Trp Val Gln Val 50 55 60

Lys Ser Glu Arg Ser Arg Asn Ser Arg Lys Trp Cys Arg Arg Arg Gly 65 70 75 80

Ile Glu Glu His Arg Leu Tyr Glu Met Ala Asn Phe Gly Ala Ser Ser 85 90 95

Arg Thr Val

<210> 1334

<211> 163

<212> PRT

<213> Homo sapiens

<400> 1334

Ala Leu Ala Arg Ala Ser Arg Thr Asp Asp Leu His Pro Leu Ala Leu 1 5 10 15

Ala Gly Ala Thr His Arg Pro Cys Pro Glu Asp Gln Glu Pro Lys Ala 20 25 30

Gly Arg Ala Trp Ser Ala Thr Ser Phe Cys Leu Pro Val Pro Cys Gly 35 40 45

Val Ser Val Leu Ser Leu Ser Leu Phe Leu Ser Leu Cys Gly Tyr 50 55 60

Val Ser Cys Tyr Phe Ser Leu Ser Cys Ser Tyr Leu Cys Leu Gly His 65 70 75 80

Leu His Pro Val Val Thr Gln Gly Cys His Thr Leu Gly Phe Ser Gly 85 90 95

Gly Asp Ser Thr Gly Ala Thr Cys Leu His Pro Arg Leu Ala Val Ser 100 105 110

Ala Cys Gln Ser Pro Cys Leu Ser Leu Cys Leu Ser Leu Cys Leu Ser 115 120 125

His Trp Gln Gly Cys Gly Val Lys Thr Asp Leu Cys Ile Phe Ile Asn 130 135 140

Leu Gly Gly Leu Pro Gly Gly Gly Lys Thr Gly Phe Ser Lys Gly Gln 145 150 155 160

Glu Arg Thr

<210> 1335

<211> 552

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (142)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1335

Met Leu Ile Leu Gly Ser Met Phe Ser Leu Val Glu Pro Val Leu Thr
1 5 10 15

| Ile        | Ala        | Ala        | Ala<br>20  | Leu        | Ser        | Val        | Gln        | Ser<br>25  | Pro          | Phe        | Thr        | Arg        | Ser<br>30  | Ala        | Gln        |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|------------|------------|------------|------------|------------|------------|
| Ser        | Ser        | Pro<br>35  | Glu        | Cys        | Ala        | Ala        | Ala<br>40  | Arg        | Arg          | Pro        | Leu        | Glu<br>45  | Ser        | Asp        | Gln        |
| Glγ        | Asp<br>50  | Pro        | Phe        | Thr        | Leu        | Phe<br>55  | Asn        | Val        | Phe          | Asn        | Ala<br>60  | Trp        | Val        | Gln        | Val        |
| Lys<br>65  | Ser        | Glu        | Arg        | Ser        | Arg<br>70  | Asn        | Ser        | Arg        | Lys          | Trp<br>75  | Cys        | Arg        | Arg        | Arg        | Gly<br>80  |
| Ile        | Glu        | Glu        | His        | Arg<br>85  | Leu        | Tyr        | Glu        | Met        | Ala<br>90    | Asn        | Leu        | Arg        | Arg        | Gln<br>95  | Phe        |
| Lys        | Glu        | Leu        | Leu<br>100 | Glu        | Asp.       | His        | Gly        | Leu<br>105 | Leu          | Ala        | Cly        | Ala        | Gln<br>110 | Ala        | Ala        |
| Gln        | Val        | Gly<br>115 | Asp        | Ser        | Tyr        | Ser        | Arg<br>120 | Leu        | Gln          | Gln        | Arg        | Arg<br>125 | Glu        | Arg        | Arg        |
| Ala        | Leu<br>130 | His        | Gln        | Leu        | Lys        | Arg<br>135 | Gln        | His        | Glu          | Glu        | Gly<br>140 | Ala        | Xaa        | Суз        | Arg        |
| Arg<br>145 | Lys        | Val        | Leu        | Arg        | Leu<br>150 | Gln        | Glu        | Glu        | Gln          | Asp<br>155 | Gly        | Gly        | Ser        | Ser        | Asp<br>160 |
| Glu        | Asp        | Arg        | Ala        | Gly<br>165 | Pro        | Ala        | Pro        | Pro        | Gly<br>170   | Ala        | Ser        | Asp        | Gly        | Val<br>175 | Asp        |
| Ile        | Gln        | Asp        | Val<br>180 | Lys        | Phe        | Lys        | Leu        | Arg<br>185 | His          | Asp        | Leu        | Ala        | Gln<br>190 | Leu        | Gln        |
| Ala        | Ala        | Ala<br>195 | Ser        | Ser        | Ala        | Gln        | Asp<br>200 | Leu        | Ser          | Arg        | Glu        | Gln<br>205 | Leu        | Ala        | Leu        |
| Leu        | Lys<br>210 | Leu        | Val        | Leu        | Gly        | Arg<br>215 | Gly        | Leu        | Tyr          | Pro        | Gln<br>220 | Leu        | Ala        | Val        | Pro        |
| Asp<br>225 | Ala        | Phe        | Asn        | Ser        | Ser<br>230 | Arg        | Lys        | Asp        | Ser          | Asp<br>235 | Gln        | Ile        | Phe        | His        | Thr<br>240 |
| Gln        | Ala        | Lys        | Gln        | Gly<br>245 |            | Val        | Leu        | His        | Pro<br>250   | Thr        | Суѕ        | Val        | Phe        | Ala<br>255 | Gly        |
| Ser        | Pro        | Glu        | Val<br>260 |            | His        | Ala        | Gln        | Glu<br>265 |              | Glu        | Ala        | Ser        | Asn<br>270 | Cys        | Asp        |
| Gly        | Ser        | Arg<br>275 | _          | Asp        | Lys        | Asp        | Lys<br>280 |            | Ser          | Ser        | Lys        | His<br>285 |            | Leu        | Leu        |
| Ser        | Phe<br>290 |            | Ser        | Leu        | Leu        | Glu<br>295 |            | Asn        | Lys          | Pro        | Tyr<br>300 |            | Val        | Asn        | Cys        |
| Val<br>305 | Arg        | Ile        | Pro        | Ala        | Leu<br>310 | Gln        | Ser        | Leu        | Leu          | Leu<br>315 |            | Ser        | Arg        | Ser        | Leu<br>320 |
| Asp        | Thr        | Asn        | Gly        | Asp<br>325 |            | Ser        | Arg        | Leu        | . Val<br>330 |            | Asp        | Gly        | Trp        | Leu<br>335 |            |

Leu Gln Leu Ala Asp Ser Glu Ser Ala Ile Arg Leu Leu Ala Ala Ser 340 345 350

Leu Arg Leu Arg Ala Arg Trp Glu Ser Ala Leu Asp Arg Gln Leu Ala 355 360 365

His Gln Ala Gln Gln Gln Leu Glu Glu Glu Glu Glu Asp Thr Pro Val $370 \,$   $375 \,$  380

Ser Pro Lys Glu Val Ala Thr Leu Ser Lys Glu Leu Leu Gln Phe Thr 385 390 395 400

Ala Ser Lys Ile Pro Tyr Ser Leu Arg Arg Leu Thr Gly Leu Glu Val 405 410 415

Gln Asn Met Tyr Val Gly Pro Gln Thr Ile Pro Ala Thr Pro His Leu
420 425 430

Pro Gly Leu Phe Gly Ser Ser Thr Leu Ser Pro His Pro Thr Lys Gly
435
440
445

Gly Tyr Ala Val Thr Asp Phe Leu Thr Tyr Asn Cys Leu Thr Asn Asp 450 455 460

Thr Asp Leu Tyr Ser Asp Cys Leu Arg Thr Phe Trp Thr Cys Pro His 465 470 475 480

Cys Gly Leu His Ala Pro Leu Thr Pro Leu Glu Arg Ile Ala His Glu 485 490 495

Asn Thr Cys Pro Gln Ala Pro Gln Asp Gly Pro Pro Gly Ala Glu Glu 500 505 510

Ala Ala Leu Glu Thr Leu Gln Lys Thr Ser Val Leu Gln Arg Pro Tyr 515 520 525

His Cys Glu Ala Cys Gly Lys Asp Phe Leu Phe Thr Pro Thr Glu Val 530 535 540

Leu Arg His Arg Lys Gln His Val 545

<210> 1336

<211> 78

<212> PRT

<213> Homo sapiens

<400> 1336

Met Ser Leu Tyr Gly Thr Arg Trp Arg Ile Ser Trp Pro His Trp Arg

1 5 10 15

Arg Val Val Leu Val Ser Leu Leu Ser Ser Ser Gly Gly Gln Ile Ser 20 25 30

Pro Ser Leu Ser His His Leu Pro Cys Ser Asp Phe Phe Glu Leu Glu 35 40 45

Thr Ser Leu Ala Leu Phe Trp Leu Thr Thr Leu Val Pro Ser Ile Thr 50 60

Asn Ile Thr Arg Val Phe Thr Thr Leu Leu Arg Thr Leu Met 65 70 75

<210> 1337

<211> 78

<212> PRT

<213> Homo sapiens

<400> 1337

Met Ser Leu Tyr Gly Thr Arg Trp Arg Ile Ser Trp Pro His Trp Arg 1 10 15

Arg Val Val Leu Val Ser Leu Leu Ser Ser Ser Gly Gly Gln Ile Ser 20 25 30

Pro Ser Leu Ser His His Leu Pro Cys Ser Asp Phe Phe Glu Leu Glu 35 40 45

Thr Ser Leu Ala Leu Phe Trp Leu Thr Thr Leu Val Pro Ser Ile Thr 50 55 60

Asn Ile Thr Arg Val Phe Thr Thr Leu Leu Arg Thr Leu Met 65 70 75

<210> 1338

<211> 159

<212> PRT

<213> Homo sapiens

<400> 1338

Met Gly Cys Leu Trp Gly Leu Ala Leu Pro Leu Phe Phe Cys Trp 1 5 10 15

Glu Val Gly Val  $\tilde{\text{Ser}}$  Gly Ser Ser Ala Gly Pro Ser Thr Arg Arg Ala 20 25 30

Asp Thr Ala Met Thr Thr Asp Asp Thr Glu Val Pro Ala Met Thr Leu 35 40 45

Ala Pro Gly His Ala Ala Leu Glu Thr Gln Thr Leu Ser Ala Glu Thr 50 55 60

Ser Ser Arg Ala Ser Thr Pro Ala Gly Pro Ile Pro Glu Ala Glu Thr 65 70 75 80

Arg Gly Ala Lys Arg Ile Ser Pro Ala Arg Glu Thr Arg Ser Phe Thr 85 90 95

Lys Thr Ser Pro Asn Phe Met Val Leu Ile Ala Thr Ser Val Glu Thr 100 105 110

Ser Ala Ala Ser Gly Ser Pro Glu Gly Ala Arg Met Thr Thr Val Gln 115 120 125

Thr Ile Thr Gly Ser Asp Pro Arg Lys Pro Ser Leu Thr Pro Phe Ala 130 135 140

Pro Met Thr Ala Leu Lys Arg Gln Arg His Ser Gln Trp Thr Tyr 145 150 155

<210> 1339

<211> 149

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (123)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (144)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1339

Met Gly Cys Leu Trp Gly Leu Ala Leu Pro Leu Phe Phe Cys Trp 1 5 10 15

Glu Val Gly Val Ser Gly Ser Ser Ala Gly Pro Ser Thr Arg Arg Ala 20 25 30

Asp Thr Ala Met Thr Thr Asp Asp Thr Glu Val Pro Ala Met Thr Leu 35 40 45

Ala Pro Gly His Ala Ala Leu Glu Thr Gln Thr Leu Ser Ala Glu Thr 50 55 60

Ser Ser Arg Ala Ser Thr Pro Ala Gly Pro Ile Pro Glu Ala Glu Thr 65 70 75 80

Arg Gly Ala Lys Arg Ile Ser Pro Ala Arg Glu Thr Arg Ser Phe Thr 85 90 95

Lys Thr Ser Pro Asn Phe Met Val Leu Ile Ala Thr Ser Val Glu Thr
100 105 110

Ser Xaa Ala Ser Gly Ser Pro Glu Gly Ala Xaa Met Thr Thr Val Gln
115 120 125

Thr Ile Thr Gly Ser Asp Pro Arg Glu Ala Ile Phe Asp Thr Leu Xaa 130 135 140

Thr Asp Asp Ser Ser

145

<110> 1340

<211> 595

<212> PRT

<213> Homo sapiens

<400> 1340

Met Gly Cys Leu Trp Gly Leu Ala Leu Pro Leu Phe Phe Cys Trp 1 5 10 15

Glu Val Gly Val Ser Gly Ser Ser Ala Gly Pro Ser Thr Arg Arg Ala 20 25 30

Asp Thr Ala Met Thr Thr Asp Asp Thr Glu Val Pro Ala Met Thr Leu 35 40 45

Ala Pro Gly His Ala Ala Leu Glu Thr Gln Thr Leu Ser Ala Glu Thr 50 55 60

Ser Ser Arg Ala Ser Thr Pro Ala Gly Pro Ile Pro Glu Ala Glu Thr 65 70 75 80

Arg Gly Ala Lys Arg Ile Ser Pro Ala Arg Glu Thr Arg Ser Phe Thr 85 90 95

Lys Thr Ser Pro Asn Phe Met Val Leu Ile Ala Thr Ser Val Glu Thr  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Ser Ala Ala Ser Gly Ser Pro Glu Gly Ala Arg Met Thr Thr Val Gln
115 120 125

Thr Ile Thr Gly Ser Asp Pro Arg Glu Ala Ile Phe Asp Thr Leu Cys 130 140

Thr Asp Asp Ser Ser Glu Glu Ala Lys Thr Leu Thr Met Asp Ile Leu 145 150 155 160

Thr Leu Ala His Thr Ser Thr Glu Ala Lys Gly Leu Ser Ser Glu Ser

Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr Pro Ser Arg Ala 180 195 190

Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr Pro 195 200 205

Ser Arg Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val 210 215 220

Ile Thr Pro Ser Arg Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro 225 230 235 240

His Pro Val Ile Thr Pro Ser Arg Ala Ser Glu Ser Ser Ala Ser Ser 245 250 255

Asp Gly Pro His Pro Val Ile Thr Pro Ser Arg Ala Ser Glu Ser Ser 260 270

Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr Pro Ser Trp Ser Pro

275 280 285

Gly Ser Asp Val Thr Leu Leu Ala Glu Ala Leu Val Ser Val Thr Asn 290 295 300

Ile Glu Val Ile Asn Cys Ser Ile Thr Glu Ile Glu Thr Thr Thr Ser 305 310 315 320

Ser Ile Pro Gly Ala Ser Asp Thr Asp Leu Ile Pro Thr Glu Gly Val 325 330 335

Lys Ala Ser Ser Thr Ser Asp Pro Pro Ala Leu Pro Asp Ser Thr Glu 340 345 350

Ala Lys Pro His Ile Thr Glu Val Thr Ala Ser Ala Glu Thr Leu Ser 355 360 365

Thr Ala Gly Thr Thr Glu Ser Ala Ala Pro Asp Ala Thr Val Gly Thr 370 375 380

Pro Leu Pro Thr Asn Ser Ala Thr Glu Arg Glu Val Thr Ala Pro Gly 385 390 395 400

Ala Thr Thr Leu Ser Gly Ala Leu Val Thr Val Ser Arg Asn Pro Leu 405 410 415

Glu Glu Thr Ser Ala Leu Ser Val Glu Thr Pro Ser Tyr Val Lys Val 420 425 430

Ser Gly Ala Ala Pro Val Ser Ile Glu Ala Gly Ser Ala Val Gly Lys 435 440 445

Thr Thr Ser Phe Ala Gly Ser Ser Ala Ser Ser Tyr Ser Pro Ser Glu 450 455 460

Ala Ala Leu Lys Asn Phe Thr-Pro Ser Glu Thr Pro Thr Met Asp Ile 465 470 475 480

· Ala Thr Lys Gly Pro Phe Pro Thr Ser Arg Asp Pro Leu Pro Ser Val 485 490 495

Pro Pro Thr Thr Asn Ser Ser Arg Gly Thr Asn Ser Thr Leu Ala
. 500 505 510

Lys Ile Thr Thr Ser Ala Lys Thr Thr Met Lys Pro Pro Thr Ala Thr 515 520 525

Pro Thr Thr Ala Arg Thr Arg Pro Thr Thr Asp Val Ser Ala Gly Glu 530 535 540

Asn Gly Gly Phe Leu Leu Leu Arg Leu Ser Val Ala Ser Pro Glu Asp 545 550 555 560

Leu Thr Asp Pro Arg Val Ala Glu Arg Leu Met Gln Gln Leu His Arg
565 570 575

Glu Leu His Ala His Ala Pro His Phe Gln Val Ser Leu Leu Arg Val
580 585 590

Arg Arg Gly

595

<210> 1341

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1341

Met Trp Asn Pro Trp Ile Ala Met Cys Leu Leu Gly Leu Ser Tyr Ser 1 10 15

Leu Leu Ala Cys Ala Leu Trp Pro Met Val Ala Phe Val Val Pro Glu 20 25 30

His Gln Leu Gly Thr Ala Tyr Gly Phe Met Gln Ser Ile Gln Asn Leu 35 40 45

Gly Leu Ala Ile Ile Ser Ile Ile Ala Gly Met Ile Leu Asp Ser Arg
50 55 60

Gly Tyr Leu Phe Leu Glu Val Phe Phe Ile Ala Cys Val Ser Leu Ser 65 70 75 80

Leu Leu Ser Val Val Leu Leu Tyr Leu Val Asn Arg Ala Gln Gly Gly 85 90 95

Asn Leu Asn Tyr Ser Ala Arg Gln Arg Glu Glu Ile Lys Phe Ser His 100 105 110

Thr Glu

<210> 1342

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1342

Met Trp Asn Pro Trp Ile Ala Met Cys Leu Leu Gly Leu Ser Tyr Ser 1 10 15

Leu Leu Ala Cys Ala Leu Trp Pro Met Val Ala Phe Val Val Pro Glu 20 25 30

His Gln Leu Gly Thr Ala Tyr Gly Phe Met Gln Ser Ile Gln Asn Leu 35 40 45

Gly Leu Ala Ile Ile Ser Ile Ile Ala Gly Met Ile Leu Asp Ser Arg 50 55 60

Gly Tyr Leu Phe Leu Glu Val Phe Phe Ile Ala Cys Val Ser Leu Ser 55 70 75 80

Leu Leu Ser Val Val Leu Leu Tyr Leu Val Asn Arg Ala Gln Gly Gly 85 90 95

Asn Leu Asn Tyr Ser Ala Arg Gln Arg Glu Glu Ile Lys Phe Ser His 100 105 110

Thr Glu

<210> 1343

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1343

Met Trp Asn Pro Trp Ile Ala Met Cys Leu Leu Gly Leu Ser Tyr Ser 1 5 10 15

Leu Leu Ala Cys Ala Leu Trp Pro Met Val Ala Phe Val Val Pro Glu 20 25 30

His Gln Leu Gly Thr Ala Tyr Gly Phe Met Gln Ser Ile Gln Asn Leu 35 40 45

Gly Leu Ala Ile Ile Ser Ile Ile Ala Gly Met Ile Leu Asp Ser Arg 50 55 60

Gly Tyr Leu Phe Leu Glu Val Phe Phe Ile Ala Cys Val Ser Leu Ser 65 70 75 80

Leu Leu Ser Val Val Leu Leu Tyr Leu Val Asn Arg Ala Gln Gly Gly 85 90 95

Asn Leu Asn Tyr Ser Ala Arg Gln Arg Glu Glu Ile Lys Phe Ser His 100 105 110

Thr Glu

<210> 1344

<211> 465

<212> PRT

<213> Homo sapiens

<400> 1344

Met Glu Glu Asp Glu Glu Ala Arg Ala Leu Leu Ala Gly Gly Pro

1 5 10 15

Asp Glu Ala Asp Arg Gly Ala Pro Ala Ala Pro Gly Ala Leu Pro Ala 20 25 30

Leu Cys Asp Pro Ser Arg Leu Ala His Arg Leu Leu Val Leu Leu Leu 35 40 45

Met Cys Phe Leu Gly Phe Gly Ser Tyr Phe Cys Tyr Asp Asn Pro Ala 50 55 60

Ala Leu Gln Thr Gln Val Lys Arg Asp Met Gln Val Asn Thr Thr Lys
65 70 75 80

| Phe        | Met        | Leu        | Leu        | Tyr<br>85  | Ala        | Trp        | Tyr        | Ser        | Trp<br>90  | Pro        | Asn        | Val        | Val        | Leu<br>95  | Cys        |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Phe        | Phe        | Gly        | Gly<br>100 | Phe        | Leu        | Ile        | Asp        | Arg<br>105 | Val        | Phe        | Gly        | Ile        | Arg<br>110 | Trp        | Gly        |
| Thr        | Ile        | Ile<br>115 | Phe        | Ser        | Суѕ        | Phe        | Val<br>120 | Cys        | Ile        | Gly        | Gln        | Val<br>125 | Val        | Phe        | Ala        |
| Leu        | Gly<br>130 | Gly        | Ile        | Phe        | Asn        | Ala<br>135 | Phe        | Trp        | Leu        | Met        | Glu<br>140 | Phe        | Gly        | Arg        | Phe        |
| Val<br>145 | Phe        | Gly        | Ile        | Gly        | Gly<br>150 | Glu        | Ser        | Leu        | Ala        | Val<br>155 | Ala        | Gln        | Asn        | Thr        | Tyr<br>160 |
| Ala        | Val        | Ser        | Trp        | Phe<br>165 | Lys        | Gly        | Lys        | Glu        | Leu<br>170 | Asn        | Leu        | Val        | Phe        | Gly<br>175 | Leu        |
| Gln        | Leu        | Ser        | Met<br>180 | Ala        | Arg        | Ile        | Gly        | Ser<br>185 | Thr        | Val        | Asn        | Met        | Asn<br>190 | Leu        | Met        |
| Gly        | Trp        | Leu<br>195 | Tyr        | Ser        | Lys        | Ile        | Glu<br>200 | Ala        | Leu        | Leu        | Gly        | Ser<br>205 | Ala        | Gly        | His        |
| Thr        | Thr<br>210 | Leu        | Gly        | Ile        | Thr        | Leu<br>215 | Met        | Ile        | Gly        | Gly        | Ile<br>220 | Thr        | Cys        | Ile        | Leu        |
| Ser<br>225 | Leu        | Ile        | Cys        | Ala        | Leu<br>230 | Ala        | Leu        | Ala        | Tyr        | Leu<br>235 | Asp        | Gln        | Arg        | Ala        | Glu<br>240 |
| Arg        | Ile        | Leu        | His        | Lys<br>245 | Glu        | Gln        | Gly        | Lys        | Thr<br>250 | Gly        | Glu        | Val        | Ile        | Lys<br>255 | Leu        |
| Thr        | Asp        | Val        | Lys<br>260 | Asp        | Phe        | Ser        | Leu        | Pro<br>265 | Leu        | Trp        | Leu        | Ile        | Phe<br>270 | Ile        | Ile        |
| Cys        | Val        | Cys<br>275 | Tyr        | Tyr        | Val        | Ala        | Val<br>280 | Phe        | Pro        | Phe        | Ile        | Gly<br>285 | Leu        | Gly        | Lys        |
| Val        | Phe<br>290 | Phe        | Thr        | Glu        | Lys        | Phe<br>295 | Gly        | Phe        | Ser        | Ser        | Gln<br>300 | Ala        | Ala        | Ser        | Ala        |
| Ile<br>305 | Asn        | Ser        | Val        | Val        | Tyr<br>310 | Val        | Ile        | Ser        | Ala        | Pro<br>315 | Met        | Ser        | Pro        | Val        | Phe<br>320 |
| Gly        | Leu        | Leu        | Val        | Asp<br>325 | Lys        | Thr        | Gly        | Lys        | Asn<br>330 | Ile        | Ile        | Trp        | Val        | Leu<br>335 | Cys        |
| Ala        | Val        | Ala        | Ala<br>340 | Thr        | Leu        | Val        | Ser        | His<br>345 | Met        | Met        | Leu        | Ala        | Phe<br>350 | Thr        | Met        |
| Trp        | Asn        | Pro<br>355 | Trp        | Ile        | Ala        | Met        | Cys<br>360 | Leu        | Leu        | Gly        | Leu        | Ser<br>365 | Tyr        | Ser        | Leu        |
| Leu        | Ala<br>370 | Cys        | Ala        | Leu        | Trp        | Pro<br>375 | Met        | Val        | Ala        | Phe        | Val<br>380 | Val        | Pro        | Glu        | His        |
| Gln<br>385 | Leu        | Gly        | Thr        | Ala        | Tyr<br>390 | Gly        | Phe        | Met        | Gln        | Ser<br>395 | Ile        | Gln        | Asn        | Leu        | Gly<br>400 |

Leu Ala Ile Ile Ser Ile Ile Ala Gly Met Ile Leu Asp Ser Arg Gly 405 410 415

Tyr Leu Phe Leu Glu Val Phe Phe Ile Ala Cys Val Ser Leu Ser Leu 420 425 430

Leu Asn Tyr Ser Ala Arg Gln Arg Glu Glu Ile Lys Phe Ser His Thr 450 455 460

Glu 465

<210> 1345

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1345

Met Gly Leu Lys Ala Leu Pro Glu Pro Phe Met Ser Leu Val Ser His 1 5 10 15

Leu Leu Arg Thr Phe Phe Leu Val Trp Phe Val Gly Leu Pro Val Ala 20 25 30

Ile Leu Gly Asn Leu Leu Glu Cys Tyr Ala Asn Val Phe Thr Gly Asn 35 40 45

Gly Gly Gly Pro Glu Pro Trp Gly Gly His Leu Val Ser Glu Cys Leu
50 55 60

Ala Leu Pro Gln Leu Gly Ile Gln Tyr Leu Ala Leu Ser Gly Gly Ile 65 70 75 80

Ile Trp Leu

<210> 1346

<211> 73

<212> PRT

<213> Homo sapiens

<400> 1346

Met Ser Leu Val Ser His Leu Leu Arg Thr Phe Phe Leu Val Trp Phe 1 5 10 15

Val Gly Leu Pro Val Ala Ile Leu Gly Asn Leu Leu Glu Cys Tyr Ala 20 25 30

Asn Val Phe Thr Gly Asn Gly Gly Gly Pro Glu Pro Trp Gly Gly His 35

Leu Val Ser Glu Cys Leu Ala Leu Pro Gln Leu Gly Ile Gln Tyr Leu

50 55 60

Ala Leu Ser Gly Gly Ile Ile Trp Leu 65 70

<210> 1347

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1347

Leu Leu Arg Thr Phe Phe Leu Val Trp Phe Val Gly Leu Pro Val Ala 20 25 30

Ile Leu Gly Asn Leu Leu Glu Cys Tyr Ala Asn Val Phe Thr Gly Asn 35 40 45

Gly Gly Gly Pro Glu Pro Trp Gly Gly His Leu Val Ser Glu Cys Leu
50 55 60

Ala Leu Pro Gln Leu Gly Ile Gln Tyr Leu Ala Leu Ser Gly Gly Ile 65 70 75 80

Ile Trp Leu

<210> 1348

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1348-

Met Phe Leu Ala Arg Val Pro Phe Leu Phe Thr Ile Val Pro Phe Ser 1 5 10 15

Val Leu Arg Ser Met Leu Ser Lys Val Val Arg Ser Thr Glu Gln Gly 20 25 30

Thr Leu Phe Ala Cys Ile Ala Phe Leu Glu Thr Leu Gly Gly Val Thr 35 40 45

Ala Val Ser Thr Phe Asn Gly Ile Tyr Ser Ala Thr Val Ala Trp Tyr 50 55 60

Pro Gly Phe Thr Phe Leu Leu Ser Ala Gly Leu Leu Leu Pro Ala 65 70 75 80

Ile Ser Leu Cys Val Val Lys Cys Thr Ser Trp Asn Glu Gly Ser Tyr 85 90 95

Glu Leu Leu Ile Gln Glu Glu Ser Ser Glu Asp Ala Ser Asp Arg 100 105 110

<210> 1349

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1349

Met Phe Leu Ala Arg Val Pro Phe Leu Phe Thr Ile Val Pro Phe Ser 1 5 10 15

Val Leu Arg Ser Met Leu Ser Lys Val Val Arg Ser Thr Glu Gln Gly
20 25 30

Thr Leu Phe Ala Cys Ile Ala Phe Leu Glu Thr Leu Gly Gly Val Thr 35 40 45

Ala Val Ser Thr Phe Asn Gly Ile Tyr Ser Ala Thr Val Ala Trp Tyr 50 60

Pro Gly Phe Thr Phe Leu Leu Ser Ala Gly Leu Leu Leu Leu Pro Ala 65 70 75 80

Ile Ser Leu Cys Val Val Lys Cys Thr Ser Trp Asn Glu Gly Ser Tyr 85 90 95

Glu Leu Leu Ile Gl<br/>n Glu Glu Ser Ser Glu Asp Ala Ser Asp Arg $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

<210> 1350

<211> 230

<212> PRT

<213> Homo sapiens

<400> 1350

Met Ser Cys Ser Glu Gly Phe Lys Asn Leu Phe Tyr Arg Thr Tyr Met

1 5 10 15

Leu Phe Lys Asn Ala Ser Gly Lys Arg Arg Phe Leu Leu Cys Leu Leu 20 25 30

Leu Phe Thr Val Ile Thr Tyr Phe Phe Val Val Ile Gly Ile Ala Pro 35 40 45

Ile Phe Ile Leu Tyr Glu Leu Asp Ser Pro Leu Cys Trp Asn Glu Val 50 55 60

Phe Ile Gly Tyr Gly Ser Ala Leu Gly Ser Ala Ser Phe Leu Thr Ser 65 70 75 80

Phe Leu Gly Ile Trp Leu Phe Ser Tyr Cys Met Glu Asp Ile His Met
85 90 95

Ala Phe Ile Gly Ile Phe Thr Thr Met Thr Gly Met Ala Met Thr Ala 100 105 110

Phe Ala Ser Thr Thr Leu Met Met Phe Leu Ala Arg Val Pro Phe Leu 115 120 125

Phe Thr Ile Val Pro Phe Ser Val Leu Arg Ser Met Leu Ser Lys Val Val Arg Ser Thr Glu Gln Gly Thr Leu Phe Ala Cys Ile Ala Phe Leu 155 Glu Thr Leu Gly Gly Val Thr Ala Val Ser Thr Phe Asn Gly Ile Tyr 165 170 Ser Ala Thr Val Ala Trp Tyr Pro Gly Phe Thr Phe Leu Leu Ser Ala 185 Gly Leu Leu Leu Pro Ala Ile Ser Leu Cys Val Val Lys Cys Thr 200 Ser Trp Asn Glu Gly Ser Tyr Glu Leu Leu Ile Gln Glu Glu Ser Ser 215 Glu Asp Ala Ser Asp Arg <210> 1351 <211> 137 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (111) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1351 Met Tyr Leu Gln Val Glu Thr Arg Thr Ser Ser Arg Leu His Leu Lys Arg Ala Pro Gly Ile Arg Ser Trp Ser Leu Leu Val Gly Ile Leu Ser Ile Gly Leu Ala Ala Ala Tyr Tyr Ser Gly Asp Ser Leu Gly Trp Lys Leu Phe Tyr Val Thr Gly Cys Leu Phe Val Ala Val Gln Asn Leu Glu

75

Asp Trp Glu Glu Ala Ile Phe Asp Lys Ser Thr Gly Lys Val Val Leu

70

Lys Thr Phe Ser Leu Tyr Lys Lys Leu Leu Thr Leu Phe Arg Ala Gly 85 90 95

His Asp Gln Val Val Leu Leu His Asp Val Arg Asp Val Xaa Val
100 105 110

Glu Glu Kaa Val Arg Tyr Phe Gly Lys Xaa Tyr Met-Val Val Leu 115 120 125

Arg Leu Ala Thr Gly Phe Phe His Pro 130 135

<210> 1352

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1352

Met Tyr Leu Gln Val Glu Thr Arg Thr Ser Ser Arg Leu His Leu Lys

1 10 15

Arg Ala Pro Gly Ile Arg Ser Trp Ser Leu Leu Val Gly Ile Leu Ser 20 25 30

Ile Gly Leu Ala Ala Ala Tyr Tyr Ser Gly Asp Ser Leu Gly Trp Lys 35 40 45

Leu Phe Tyr Val Thr Gly Cys Leu Phe Val Ala Val Gln Asn Leu Glu 50 55 60

Asp Trp Glu Glu Ala Ile Phe Asp Lys Ser Thr Gly Lys Val Val Leu 65 70 75 80

Lys Thr Phe Ser Leu Tyr Lys Lys Leu Leu Thr Leu Phe Arg Ala Gly 85 90 95

His Asp Gln Val Val Leu Leu His Asp Val Arg Ser Gly Cys Gln 100 105 110

Ser Leu Val Ala Gly Gln Gly His His Asn His Lys 115 120

<210> 1353

<211> 145

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (123)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1353
Met Tyr Leu Gln Val Glu Thr Arg Thr Ser Ser Arg Leu His Leu Lys
                                    10
Arg Ala Pro Gly Ile Arg Ser Trp Ser Leu Leu Val Gly Ile Leu Ser
                                25
Ile Gly Leu Ala Ala Ala Tyr Tyr Ser Gly Asp Ser Leu Gly Trp Lys
Leu Phe Tyr Val Thr Gly Cys Leu Phe Val Ala Val Gln Asn Leu Glu
Asp Trp Glu Glu Ala Ile Phe Asp Lys Ser Thr Gly Lys Val Val Leu
Lys Thr Phe Ser Leu Tyr Lys Lys Leu Leu Thr Leu Phe Arg Ala Gly
His Asp Gln Val Val Leu Leu His Asp Val Arg Asp Val Ser Val
            100
                                105
Glu Glu Glu Lys Val Arg Tyr Phe Gly Lys Xaa Tyr Met Val Val Leu
                            120
        115
Arg Leu Ala Thr Gly Phe Xaa His Xaa Leu Thr Gln Ser Ala Asp Met
                        1.35
                                            140
Gly
145
<210> 1354
<211> 89
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1354
Met Phe Lys Asp Tyr Pro Pro Ala Ile Lys Pro Ser Tyr Asp Val Leu
```

Leu Leu Leu Leu Leu Leu Val Xaa Leu Leu Gln Ala Gly Leu Asn Thr

20

Gly Thr Ala Ile Gln Cys Val Arg Phe Lys Val Ser Ala Arg Leu Gln \$35\$ \$40\$ \$45\$

Gly Ala Ser Trp Asp Thr Gln Asn Gly Pro Gln Glu Arg Leu Ala Gly 50 60

Glu Val Ala Arg Ser Pro Leu Lys Glu Phe Xaa Lys Glu Lys Ala Trp
65 70 75 80

Arg Ala Val Val Gln Met Ala Gln 85

<210> 1355

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1355

Met Phe Lys Asp Tyr Pro Pro Ala Ile Lys Pro Ser Tyr Asp Val Leu
1 5 10 15

Leu Leu Leu Leu Leu Val Leu Leu Gln Ala Gly Leu Asn Thr
20 25 30

Gly Thr Ala Ile Gln Cys Val Arg Phe Lys Val Ser Ala Arg Leu Gln 35 40 45

Gly Ala Ser Trp Asp Thr Gln Asn Gly Pro Gln Glu Arg Leu Ala Gly 50 55 . 60

Glu Val Ala Arg Ser Pro Leu Lys Glu Phe Asp Lys Glu Lys Ala Trp 65 70 75 80

Arg Ala Val Val Gln Met Ala Gln

<210> 1356

<211> 419

<212> PRT

<213> Homo sapiens

<400> 1356

Met Asn Asn Gln Lys Gln Gln Lys Pro Thr Leu Ser Gly Gln Arg Phe
1 5 10 15

Lys Thr Arg Lys Arg Asp Glu Lys Glu Arg Phe Asp Pro Thr Gln Phe 20 25 30

Gln Asp Cys Ile Ile Gln Gly Leu Thr Glu Thr Gly Thr Asp Leu Glu
35 40 45

Ala Val Ala Lys Phe Leu Asp Ala Ser Gly Ala Lys Leu Asp Tyr Arg 50 55 60

Arg Tyr Ala Glu Thr Leu Phe Asp Ile Leu Val Ala Gly Gly Met Leu

| 65         |            |            |            |            | 70         |            |            |            |            | 75         |            |            |            |            | 80         |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ala        | Fro        | Gly        | Gly        | Thr<br>85  | Leu        | Ala        | Asp        | Asp        | Met<br>90  | Met        | Arg        | Thr        | Asp        | Val<br>95  | Суѕ        |
| Val        | Fhe        | Ala        | Ala<br>100 | Gln        | Glu        | Asp        | Leu        | Glu<br>105 | Thr        | Met        | Gln        | Ala        | Phe<br>110 | Ala        | Gln        |
| Val        | Fhe        | Asn<br>115 | Lys        | Leu        | Ile        | Arg        | Arg<br>120 | Tyr        | Lys        | Tyr        | Leu        | Glu<br>125 | Lys        | Gly        | Phe        |
| Glu        | Asp<br>130 | Glu        | Val        | Lys        | rys        | Leu<br>135 | Leu        | Leu        | Phe        | Leu        | Lys<br>140 | Gly        | Phe        | Ser        | Glu        |
| Ser<br>145 | Glu        | Arg        | Asn        | Lys        | Leu<br>150 | Ala        | Met        | Leu        | Thr        | Gly<br>155 | Val        | Leu        | Leu        | Ala        | Asn<br>160 |
| Gly        | Thr        | Leu        | Asn        | Ala<br>165 | Ser        | Ile        | Leu        | Asn        | Ser<br>170 | Leu        | Tyr        | Asn        | Glu        | Asn<br>175 | Leu        |
| Väl        | Lys        | Glu        | Gly<br>180 | Val        | Ser        | Ala        | Ala        | Phe<br>185 | Ala        | Val        | Lys        | Leu        | Phe<br>190 | Lys        | Ser        |
| Trp        | Ile        | Asn<br>195 | Glu        | Lys        | Asp        | Ile        | Asn<br>200 | Ala        | Val        | Ala        | Ala        | Ser<br>205 | Leu        | Arg        | Lys        |
| Val        | Ser<br>210 | Met        | Asp        | Asn        | Arg        | Leu<br>215 | Met        | Glu        | Leu        | Phe        | Pro<br>220 | Ala        | Asn        | Lys        | Gln        |
| Ser<br>225 | Val        | Glu        | His        | Phe        | Thr<br>230 | Lys        | Tyr        | Phe        | Thr        | Glu<br>235 | Ala        | Gly        | Leu        | Lys        | Glu<br>240 |
| Leu        | Ser        | Glu        | Tyr        | Val<br>245 | Arg        | Asn        | Gln        | Gln        | Thr<br>250 | Ile        | Gly        | Ala        | Arg        | Lys<br>255 | Glu        |
| Leu        | Gln        | Lys        | Glu<br>260 | Leu        | Gln        | Glu        | Gln        | Met<br>265 |            | Arg        | Gly        | Asp        | Pro<br>270 | Phe        | Lys        |
| Asp        | Ile        | Ile<br>275 | Leu        | Tyr        | Val        | Lys        | Glu<br>280 | Glu        | Met        | Lys        | Lys        | Asn<br>285 | Asn        | Ile        | Pro        |
| Glu        | Pro<br>290 | Val        | Val        | Ile        | Gly        | Ile<br>295 |            | Trp        | Ser        | Ser        | Val<br>300 | Met        | Ser        | Thr        | Val        |
| Glu<br>305 | Trp        | Asn        | Lys        | Lys        | Glu<br>310 |            | Leu        | Val        | Ala        | Glu<br>315 |            | Ala        | Ile        | ГÀЗ        | His<br>320 |
| Leu        | Lys        | Gln        | Туr        | Ser<br>325 |            | Leu        | Leu        | Ala        | Ala<br>330 |            | Thr        | Thr        | Gln        | Gly<br>335 | Gln        |
| Ser        | Glu        | Leu        | Thr<br>340 |            | Leu        | Leu        | Lys        | Ile<br>345 |            | Glu        | Tyr        | Суз        | Tyr<br>350 |            | Asn        |
| Ile        | His        | Phe<br>355 |            | Lys        | Ala        | Phe        | Gln<br>360 |            | Ile        | · Val      | Val        | Leu<br>365 | Phe        | Tyr        | Lys        |
| Ala        | Glu<br>370 | Val        | Leu        | Ser        | Glu        | Glu<br>375 |            | Ile        | Leu        | . Lys      | Trp<br>380 | Tyr        | Lys        | Asp        | Ala        |
| His        | Val        | Ala        | ГЛS        | Gly        | Lys        | Ser        | Val        | Fhe        | Leu        | Glu        | Gln        | Met        | Lys        | Lys        | Fhe        |

385 390 395 400

Val Glu Trp Leu Lys Asn Ala Glu Glu Glu Ser Glu Ser Glu Ala Glu
405 410 415

Glu Gly Asp

<210> 1357

<211> 19

<212> PRT

<213> Homo sapiens

<400> 1357

Thr Ile Ala Cys Met Leu Thr Phe Cys Phe Val Leu Phe Cys Phe Val 1 5 15

Leu His Phe

<210> 1358

<211> 857

<212> PRT

<213> Homo sapiens

<400> 1358

Met Ser Tyr Tyr Met Ala Asp Arg Lys His Arg Lys Ala Phe Leu Glu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Ala Arg Gln Ser Leu Glu Val Lys Met Asn Leu Glu Glu Gln Ser Gln 20 25 30

Gln Gln Glu Asn Leu Met Leu Ser Ile Leu Pro Lys His Val Ala Asp 35 40 45

Glu Met Leu Lys Asp Met Lys Lys Asp Glu Ser Gln Lys Asp Gln Gln 50 55 60

Gln Phe Asn Thr Met Tyr Met Tyr Arg His Glu Asn Val Ser Ile Leu 65 70 75 80

Phe Ala Asp Ile Val Gly Phe Thr Gln Leu Ser Ser Ala Cys Ser Ala 85 90 95

Gln Glu Leu Val Lys Leu Leu Asn Glu Leu Phe Ala Arg Phe Asp Lys 100 105 110

Leu Ala Ala Lys Tyr His Gln Leu Arg Ile Lys Ile Leu Gly Asp Cys 115 120 125

Tyr Tyr Cys Ile Cys Gly Leu Pro Asp Tyr Arg Glu Asp His Ala Val 130 135 140

| Arg        | Glu        | Lys        | Thr        | Lys<br>165          | Thr        | Gly        | Val        | Asp        | Met<br>170 | Arg        | Val        | Gly        | Val        | His<br>175 | Thr        |
|------------|------------|------------|------------|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Gly        | Thr        | Val        | Leu<br>180 | Gly                 | Gly        | Val        | Leu        | Gly<br>185 | Gln        | Lys        | Arg        | Trp        | Gln<br>190 | Tyr        | Asp        |
| Val        | Trp        | Ser<br>195 | Thr        | Asp                 | Val        | Thr        | Val<br>200 | Ala        | Asn        | Lys        | Met        | Glu<br>205 | Ala        | Gly        | Gly        |
| Ile        | Pro<br>210 | Gly        | Arg        | Val                 | His        | Ile<br>215 | Ser        | Gln        | Ser        | Thr        | Met<br>220 | Asp        | Cys        | Leu        | Lys        |
| Gly<br>225 | Glu        | Phe        | Asp        | Val                 | Glu<br>230 | Pro        | Gly        | Asp        | Gly        | Gly<br>235 | Ser        | Arg        | Cys        | Asp        | Tyr<br>240 |
| Leu        | Glu        | Glu        | Lys        | Gly<br>2 <b>4</b> 5 | Ile        | Glu        | Thr        | Tyr        | Leu<br>250 | Ile        | Ile        | Ala        | Ser        | Lys<br>255 | Pro        |
| Glu        | Val        | Lys        | Lys<br>260 | Thr                 | Ala        | Thr        | Gln        | Asn<br>265 | Gly        | Leu        | Asn        | Gly        | Ser<br>270 | Ala        | Leu        |
| Pro        | Asn        | Gly<br>275 | Ala        | Pro                 | Ala        | Ser        | Ser<br>280 | Lys        | Ser        | Ser        | Ser        | Pro<br>285 | Ala        | Leu        | Ile        |
| Glu        | Thr<br>290 | Lys        | Glu        | Pro                 | Asn        | Gly<br>295 | Ser        | Ala        | His        | Ser        | Ser<br>300 | Gly        | Ser        | Thr        | Ser        |
| Glu<br>305 | Lys        | Pro        | Glu        | Glu                 | Gln<br>310 | Asp        | Ala        | Gln        | Ala        | Asp<br>315 | Asn        | Pro        | Ser        | Phe        | Pro<br>320 |
| Asn        | Pro        | Arg        | Arg        | Arg<br>325          | Leu        | Arg        | Leu        | Gln        | Asp<br>330 | Leu        | Ala        | Asp        | Arg        | Val<br>335 | Val        |
| Asp        | Ala        | Ser        | Glu<br>340 | Asp                 | Glu        | His        | Glu        | Leu<br>345 | Asn        | Gln        | Leu        | Leu        | Asn<br>350 | Glu        | Ala        |
| Leu        | Leu        | Glu<br>355 | Arg        | Glu                 | Ser        | Ala        | Gln<br>360 | Val        | Val        | Lys        | Lys        | Arg<br>365 | Asn        | Thr        | Phe        |
| Leu        | Leu<br>370 | Ser        | Met        | Arg                 | Phe        | Met<br>375 | Asp        | Pro        | Glu        | Met        | Glu<br>380 | Thr        | Arg        | Tyr        | Ser        |
| Val<br>385 | Glu        | Lys        | Glu        | Lys                 | Gln<br>390 | Ser        | Gly        | Ala        | Ala        | Phe<br>395 | Ser        | Суз        | Ser        | Cys        | Val<br>400 |
| Val        | Leu        | Leu        | Cys        | Thr<br>405          | Ala        | Leu        | Val        | Glu        | Ile<br>410 | Leu        | Ile        | Asp        | Pro        | Trp<br>415 | Leu        |
| Met        | Thr        | Asn        | Tyr<br>420 | Val                 | Thr        | Phe        | Met        | Val<br>425 | Gly        | Glu        | Ile        | Leu        | Leu<br>430 | Leu        | Ile        |
| Leu        | Thr        | Ile<br>435 | Cys        | Ser                 | Leu        | Ala        | Ala<br>440 | Ile        | Phe        | Pro        | Arg        | Ala<br>445 | Phe        | Pro        | Lys        |
| Lys        | Leu<br>450 | Val        | Ala        | Phe                 | Ser        | Thr<br>455 | Trp        | Ile        | Asp        | Arg        | Thr<br>460 | Arg        | Trp        | Ala        | Arg        |
| Asn<br>465 | Thr        | Trp        | Ala        | Met                 | Leu<br>470 | Ala        | Ile        | Phe        | Ile        | Leu<br>475 | Val        | Met        | Ala        | Asn        | Val<br>480 |

Val Asp Met Val Ser His Met Val Lys Leu Thr Leu Met Leu Leu Val 485 490 Ala Gly Ala Val Ala Thr Ile Asn Leu Tyr Ala Trp Arg Pro Val Phe Asp Glu Tyr Asp His Lys Arg Phe Arg Glu His Asp Leu Pro Met Val 520 Ala Leu Glu Gln Met Gln Gly Phe Asn Pro Gly Leu Asn Gly Thr Asp 535 Arg Leu Pro Leu Val Pro Ser Lys Tyr Ser Met Thr Val Met Val Phe Leu Met Met Leu Ser Phe Tyr Tyr Phe Ser Arg His Val Glu Lys Leu 565 570 Ala Arg Thr Leu Phe Leu Trp Lys Ile Glu Val His Asp Gln Lys Glu Arg Val Tyr Glu Met Arg Arg Trp Asn Glu Ala Leu Val Thr Asn Met 600 Leu Pro Glu His Val Ala Arg His Phe Leu Gly Ser Lys Lys Arg Asp 615 Glu Glu Leu Tyr Ser Gln Thr Tyr Asp Glu Ile Gly Val Met Phe Ala Ser Leu Pro Asn Phe Ala Asp Phe Tyr Thr Glu Glu Ser Ile Asn Asn 650 Gly Gly Ile Glu Cys Leu Arg Phe Leu Asn Glu Ile Ile Ser Asp Phe Asp Ser Leu Leu Asp Asn Pro Lys Phe Arg Val Ile Thr Lys Ile Lys Thr Ile Gly Ser Thr Tyr Met Ala Ala Ser Gly Val Thr Pro Asp Val 695 Asn Thr Asn Gly Phe Ala Ser Ser Asn Lys Glu Asp Lys Ser Glu Arg 710 Glu Arg Trp Gln His Leu Ala Asp Leu Ala Asp Phe Ala Leu Ala Met Lys Asp Thr Leu Thr Asn Ile Asn Asn Gln Ser Phe Asn Asn Phe Met 745 Leu Arg Ile Gly Met Asn Lys Gly Gly Val Leu Ala Gly Val Ile Gly 755 Ala Arg Lys Pro His Tyr Asp Ile Trp Gly Asn Thr Val Asn Val Ala 775 Ser Arg Met Glu Ser Thr Gly Val Met Gly Asn Ile Gln Val Val Glu

Slu Thr Gln Val Ile Leu Arg Glu Tyr Gly Phe Arg Phe Val Arg Arg 815

Gly Pro Ile Phe Val Lys Gly Lys Gly Glu Leu Leu Thr Phe Phe Leu 820 825 830

Lys Gly Arg Asp Lys Leu Ala Thr Phe Pro Asn Gly Pro Ser Val Thr 835 840 845

Leu Pro His Gln Val Val Asp Asn Ser 850 855

<210> 1359

<211> 188

<212> PRT

<213> Homo sapiens

<400> 1359

Met Val Pro Gly Ala Ala Gly Trp Cys Cys Leu Val Leu Trp Leu Pro 1 5 10 15

Ala Cys Val Ala Ala His Gly Phe Arg Ile His Asp Tyr Leu Tyr Phe 20 25 30

Gln Val Leu Ser Pro Gly Asp Ile Arg Tyr Ile Phe Thr Ala Thr Pro 35 40 45

Ala Lys Asp Phe Gly Gly Ile Phe His Thr Arg Tyr Glu Gln Ile His 50 60

Leu Val Pro Ala Glu Pro Pro Glu Ala Cys Gly Glu Leu Ser Asn Gly 65 70 75 80

Phe Phe Ile Gln Asp Gln Ile Ala Leu Val Glu Arg Gly Gly Cys Ser 85 90 95

Phe Leu Ser Lys Thr Arg Val Val Gln Glu His Gly Gly Arg Ala Val 100 105 110

Ile Ile Ser Asp Asn Ala Val Asp Asn Asp Ser Phe Tyr Val Glu Met 115 120 125

Ile Gln Asp Ser Thr Gln Arg Thr Ala Asp Ile Pro Ala Leu Phe Leu 130 135 140 .

Leu Gly Arg Asp Gly Tyr Met Ile Arg Arg Ser Leu Glu Gln His Gly 145 150 155 160

Leu Pro Trp Ala Ile Ile Ser Ile Pro Val Asn Val Thr Ser Ile Pro
165 170 175

Thr Phe Glu Leu Cln Pro Pro Trp Thr Phe Trp
180 185

<210> 1360 <211> 188

<212> PRT

<213> Homo sapiens

<400> 1360

Met Val Pro Gly Ala Ala Gly Trp Cys Cys Leu Val Leu Trp Leu Pro 1 5 10 15

Ala Cys Val Ala Ala His Gly Phe Arg Ile His Asp Tyr Leu Tyr Phe 20 25 30

Gln Val Leu Ser Pro Gly Asp Ile Arg Tyr Ile Phe Thr Ala Thr Pro 35 40 45

Ala Lys Asp Phe Gly Gly Ile Phe His Thr Arg Tyr Glu Gln Ile His 50 60

Leu Val Pro Ala Glu Pro Pro Glu Ala Cys Gly Glu Leu Ser Asn Gly 65 70 75 80

Phe Phe Ile Gln Asp Gln Ile Ala Leu Val Glu Arg Gly Gly Cys Ser 85 90 95

Phe Leu Ser Lys Thr Arg Val Val Gln Glu His Gly Gly Arg Ala Val
100 105 110

Ile Ile Ser Asp Asn Ala Val Asp Asn Asp Ser Phe Tyr Val Glu Met
115 120 125

Ile Gln Asp Ser Thr Gln Arg Thr Ala Asp Ile Pro Ala Leu Phe Leu 130 135 140

Leu Gly Arg Asp Gly Tyr Met Ile Arg Arg Ser Leu Glu Gln His Gly 145 150 155 160

Leu Pro Trp Ala Ile Ile Ser Ile Pro Val Asn Val Thr Ser Ile Pro 165 170 175

Thr Phe Glu Leu Leu Gln Pro Pro Trp Thr Phe Trp 180 185

<210> 1361

<211> 116

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (90)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1361

Met Arg Lys Ile His Thr Pro Leu Phe Asn Leu Leu Gln Val Arg Leu 1 5 10 15

Gly Phe Val Tyr Phe Pro Cys Phe Thr Phe Pro Xaa Val Gln Ala Val 20 25 30

Val Glu Thr Gly Thr Gln Gly Leu Cys Val Ala Pro Cys Ser Ser Cys 35 40 45

Leu Gln Glu Ala Cys Gly Ala Leu Val Ser Leu Ala Ser Cys Pro Pro 50 55 60

Phe Leu Leu Pro Pro Leu Thr Leu Pro Pro Thr Leu Ser Leu Arg Thr 65 70 75 80

Ser Ser Trp Lys Gly Leu Ala Arg Ala Xaa Val Leu Ala Ser Leu Trp 85 90 95

Gly Gly Arg Leu Cys Gly Leu Lys Gly Cys Arg Leu Lys Leu Gln Gly
100 105 110

Val Gly Ala Trp 115

<210> 1362

<211> 167

<212> PRT

<213> Homo sapiens

<400> 1362

Met Arg Lys Ile His Thr Pro Leu Phe Asn Leu Leu Gln Val Arg Leu 1 5 10 15

Gly Phe Val Tyr Phe Pro Cys Phe Thr Phe Pro Cys Val Gln Ala Val 20 25 30

Val Glu Thr Gly Thr Gln Gly Leu Cys Val Ala Pro Cys Ser Ser Cys 40 45

Leu Gl<br/>n Glu Ala Cys Gly Ala Leu Val Ser Leu Ala Ser Cys Pro<br/> Pro 50  $\phantom{0}$  60

Phe Leu Leu Pro Pro Leu Thr Leu Pro Pro Thr Leu Ser Leu Arg Thr 65 70 75 80

Ser Ser Trp Lys Gly Leu Ala Arg Ala Cys Val Leu Ala Ser Leu Trp 85 90 95

Gly Gly Arg Leu Cys Gly Leu Lys Gly Cys Arg Leu Lys Leu Gln Gly
100 105 110

Val Gly Ala Trp Glu Gly Met Cys Thr Ala Leu Leu Thr Asp Pro Phe 115 120 125

Met Phe Ser Phe Phe Asp Ser Val Leu Cys Cys Pro Asp Gly Gly Val 130 135 140

Ser Pro Cys Leu Leu Pro Phe Leu Pro Trp Thr Leu Ala Ile Gly Pro 145 150 150 155

Asp Glu Arg Val His Val Val 165

<210> 1363 <211> 286 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (204) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (224) <223> Xaa equals any of the naturally occurring L-amino acids <221> SITE <222> (228) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (264) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (271) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1363 Met Tyr Leu Ser Ala Leu Gln Ser Leu Ile Pro Ser Leu Phe Ala Leu Val Leu Gln Asn Ala Pro Phe Ser Ser Lys Ala Lys Leu His Gly Glu Val Pro Gln Ile Glu Val Thr Arg Phe Pro Arg Pro Met Ser Pro Leu Gln Asp Val Ser Thr Ile Ile Gly Ser Arg Glu Gln Leu Ala Val Leu Leu Gln Leu Tyr Asp Tyr Gln Leu Glu Glu Glu Gly Thr Thr Gly Trp Glu Ser Leu Leu Trp Val Val Asn Gln Leu Leu Pro Gln Leu Ile Glu 8.5 Ile Val Gly Lys Ile Asn Val Thr Ser Thr Ala Cys Val His Glu Phe 105 Ser Arg Phe Phe Trp Arg Leu Cys Arg Thr Phe Gly Lys Ile Phe Thr 115

Asn Thr Lys Val Lys Pro Gln Phe Gln Glu Ile Leu Arg Leu Ser Glu 130 135 140

Glu Asn Ile Asp Ser Ser Ala Gly Asn Gly Val Leu Thr Lys Ala Thr 145 150 155 160

Val Pro Ile Tyr Ala Thr Gly Val Leu Thr Cys Tyr Ile Gln Glu Glu 165 170 175

Asp Arg Lys Leu Leu Val Gly Phe Leu Glu Asp Val Met Thr Leu Leu 180 185 190

Ser Leu Ser His Ala Pro Leu Asp Ser Leu Lys Xaa Ser Phe Val Glu 195 200 205

Leu Gly Ala Asn Gln Ala Tyr His Glu Leu Leu Thr Val Leu Xaa 210 215 220

Tyr Gly Val Xaa His Thr Ser Ala Leu Val Arg Cys Thr Ala Ala Arg 225 230 235 240

Met Phe Glu Leu Leu Val Lys Gly Val As<br/>n Glu Thr Leu Val Ala Gl<br/>n 245 250 255

Leu Cys Gln Asp Cys His Asn Phe Gln Pro Leu Gly Leu Phe 275 280 285

<210> 1364

<211> 283

<212> PRT

<213> Homo sapiens

<400> 1364

Met Tyr Leu Ser Ala Leu Gln Ser Leu Ile Pro Ser Leu Phe Ala Leu 1 5 10 15

Val Leu Gln Asn Ala Pro Phe Ser Ser Lys Ala Lys Leu His Gly Glu 20 25 30

Val Pro Gln Ile Glu Val Thr Arg Phe Pro Arg Pro Met Ser Pro Leu 35 40 45

Gln Asp Val Ser Thr Ile Ile Gly Ser Arg Glu Gln Leu Ala Val Leu 50 55 60

Leu Gln Leu Tyr Asp Tyr Gln Leu Glu Gln Glu Gly Thr Thr Gly Trp 65 70 75 80

Glu Ser Leu Leu Trp Val Val Asn Gln Leu Leu Pro Gln Leu Ile Glu 85 90 95

Ile Val Gly Lys Ile Asn Val Thr Ser Thr Ala Cys Val His Glu Phe

Ser Arg Phe Phe Trp Arg Leu Cys Arg Thr Phe Gly Lys Ile Phe Thr

115 120 125

Asn Thr Lys Val Lys Pro Gln Phe Gln Glu Ile Leu Arg Leu Ser Glu 130 135 140

Glu Asn Ile Asp Ser Ser Ala Gly Asn Gly Val Leu Thr Lys Ala Thr 145 150 155 160

Val Pro Ile Tyr Ala Thr Gly Val Leu Thr Cys Tyr Ile Gl<br/>n Glu Glu 165 \$170\$ 175

Asp Arg Lys Leu Leu Val Gly Phe Leu Glu Asp Val Met Thr Leu Leu 180 185 190 .

Ser Leu Ser His Ala Pro Leu Asp Ser Leu Lys Ala Ser Phe Val Glu
195 200 205

Leu Gly Ala Asn Pro Ala Tyr His Glu Leu Leu Leu Thr Val Leu Trp 210 215 220

Tyr Gly Val Val His Thr Ser Ala Leu Val Arg Cys Thr Ala Ala Arg 225 230 235 240

Met Phe Glu Val Cys Gln His Met Pro Leu Leu Val Ser Ile Ile Met 245 250 255

Ile Phe Phe Leu Arg Arg Arg Glu Phe Phe Leu Ile Lys Arg 260 265 270

Leu Cys Ile Ser Lys Lys Lys Lys Lys Lys Lys 275 280

<210> 1365

<211> 379

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (283)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (303)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (307)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1365

Met Gly Tyr Ile Asp Asp Pro Asp Lys Tyr His Gln Gly Phe Glu Leu
1 5 10 15

Leu Leu Ser Ala Leu Gly Asp Pro Ser Glu Arg Val Val Ser Ala Thr
20 25 30

| His        | Gln        | Val<br>35  | Phe        | Leu        | Pro        | Ala        | Tyr<br>40  | Ala        | Ala        | Trp        | Thr        | Thr<br>45  | Glu        | Leu        | Gly        |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asn        | Leu<br>50  | Gln        | Ser        | His        | Leu        | Ile<br>55  | Leu        | Thr        | Leu        | Leu        | Asn<br>60  | Lys        | Ile        | Glu        | Lys        |
| Leu<br>65  | Leu        | Arg        | Glu        | Gly        | Glu<br>70  | His        | Gly        | Leu        | Asp        | Glu<br>75  | His        | Lys        | Leu        | His        | Met<br>80  |
| Tyr        | Leu        | Ser        | Ala        | Leu<br>85  | Gln        | Ser        | Leu        | Ile        | Pro<br>90  | Ser        | Leu        | Phe        | Ala        | Leu<br>95  | Val        |
| Leu        | Gln        | Asn        | Ala<br>100 | Pro        | Phe        | Ser        | Ser        | Lys<br>105 | Ala        | Lys        | Leu        | His        | Gly<br>110 | Glu        | Val        |
| Pro        | Gln        | Ile<br>115 | Glu        | Val        | Thr        | Arg        | Phe<br>120 | Pro        | Arg        | Pro        | Met        | Ser<br>125 | Pro        | Leu        | Gln        |
| Asp        | Val<br>130 | Ser        | Thr        | Ile        | Ile        | Gly<br>135 | Ser        | Arg        | Glu        | Gln        | Leu<br>140 | Ala        | Val        | Leu        | Leu        |
| Gln<br>145 | Leu        | Tyr        | Asp        | Tyr        | Gln<br>150 | Leu        | Glu        | Gln        | Glu        | Gly<br>155 | Thr        | Thr        | Gly        | Trp        | Glu<br>160 |
| Ser        | Leu        | Leu        | Trp        | Val<br>165 | Val        | Asn        | Gln        | Leu        | Leu<br>170 | Pro        | Gln        | Leu        | Ile        | Glu<br>175 | Ile        |
| Val        | Gly        | Lys        | 11e<br>180 | Asn        | Val        | Thr        | Ser        | Thr<br>185 | Ala        | Cys        | Val        | His        | Glu<br>190 | Phe        | Ser        |
| Arg        | Phe        | Phe<br>195 | Trp        | Arg        | Leu        | Cys        | Arg<br>200 | Thr        | Phe        | Gly        | Lys        | Ile<br>205 | Phe        | Thr        | Asn        |
| Thr        | Lys<br>210 | Val        | Lys        | Pro        | Gln        | Phe<br>215 | Gln        | Glu        | Ile        | Leu        | Arg<br>220 | Leu        | Ser        | Glu        | Glu        |
| Asn<br>225 | Ile        | Asp        | Ser        | Ser        | Ala<br>230 | Gly        | Asn        | Gly        | Val        | Leu<br>235 | Thr        | Lys        | Ala        | Thr        | Val<br>240 |
|            |            |            |            | 245        | Gly        |            |            |            | 250        |            |            |            |            | 255        |            |
| Arg        | ГЛS        | Leu        | Leu<br>260 | Val        | Gly        | Phe        | Leu        | Glu<br>265 | Asp        | Val        | Met        | Thr        | Leu<br>270 | Leu        | Ser        |
| Leu        | Ser        | His<br>275 | Ala        | Pro        | Leu        | Asp        | Ser<br>280 | Leu        | Lys        | Хаа        | Ser        | Phe<br>285 | Val        | Glu        | Leu        |
| Gly        | Ala<br>290 | Asn        | Gln        | Ala        | Tyr        | His<br>295 | Glu        | Leu        | Leu        | Leu        | Thr<br>300 | Val        | Leu        | Xaa        | Tyr        |
| Gly<br>305 | Val        | Xaa        | His        | Thr        | Ser<br>310 | Ala        | Leu        | Val        | Arg        | Cys<br>315 | Thr        | Ala        | Ala        | Arg        | Met<br>320 |
| Phe        | Glu        | Leu        | Leu        | Val<br>325 | Lys        | Gly        | Val        | Asn        | Glu<br>330 | Thr        | Leu        | Val        | Ala        | Gln<br>335 | Arg        |
| Val        | Val        | Pro        | Ala<br>340 | Leu        | Ile        | Thr        | Leu        | Ser<br>345 | Ser        | Asp        | Pro        | Glu        | Ile<br>350 | Ser        | Val        |

Arg Ile Ala Thr Ile Pro Ala Phe Gly Thr Ile Met Glu Thr Val Ile 355 360 365

Gln Arg Glu Leu Leu Glu Arg Val Lys Met Gln 370 375

<210> 1366

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1366

Met Pro Ala Leu Leu Pro Val Ala Ser Arg Leu Leu Leu Leu Pro Arg 1 5 10 15

Val Leu Leu Thr Met Ala Ser Gly Ser Pro Pro Thr Gln Pro Ser Pro
20 25 30

Ala Ser Asp Ser Gly Ser Gly Tyr Val Pro Gly Ser Val Ser Ala Ala 35 40 45

Phe Val Thr Cys Pro Asn Glu Lys Val Ala Lys Glu Ile Ala Arg Ala 50 55 60

Val Val Glu Lys Arg Leu Ala Ala Cys Val Asn Leu Ile Pro Gln Ile 65 70 75 80

Thr Ser Ile Tyr Glu Trp Lys Gly Lys Ile Glu Glu Asp Ser Glu Val\$85\$ 90 95

Leu Met Met Ile Lys Thr Gln Ser Ser Leu Val Pro Ala Leu Thr Asp 100 105 110

Phe Val Arg Ser Val His Pro Tyr Glu Val Ala Glu Val Ile Ala Leu 115 120 125

Pro Val Glu Gln Gly Asn Phe Pro Tyr Leu Gln Trp Val Arg Gln Val 130 135

Thr Glu Ser Val Ser Asp Ser Ile Thr Val Leu Pro 145 150

<210> 1367

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1367

Met Pro Ala Leu Leu Pro Val Ala Ser Arg Leu Leu Leu Leu Pro Arg 1 5 10 15

Val Leu Leu Thr Met Ala Ser Gly Ser Pro Pro Thr Gln Pro Ser Pro
20 25 30

Ala Ser Asp Ser Gly Ser Gly Tyr Val Pro Gly Ser Val Ser Ala Ala

35 40 45

Phe Val Thr Cys Pro Asn Glu Lys Val Ala Lys Glu Ile Ala Arg Ala 50 55 60

Val Val Glu Lys Arg Leu Ala Ala Cys Val Asn Leu Ile Pro Gln Ile 65 70 75 80

Thr Ser Ile Tyr Glu Trp Lys Gly Lys Ile Glu Glu Asp Ser Glu Val
85 90 95

Leu Met Met Ile Lys Thr Gln Ser Ser Leu Val Pro Ala Leu Thr Asp 100 105 110

Phe Val Arg Ser Val His Pro Tyr Glu Val Ala Glu Val Ile Ala Leu 115 120 125

Pro Val Glu Gln Gly Asn Phe Pro Tyr Leu Gln Trp Val Arg Gln Val 130 140

Thr Glu Ser Val Ser Asp Ser Ile Thr Val Leu Pro 145 150 155

<210> 1368

<211> 442

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (164)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (247)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1368

Met Trp Arg Leu Pro Gly Leu Leu Gly Arg Ala Leu Pro Arg Thr Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Gly Pro Ser Leu Trp Arg Val Thr Pro Lys Ser Thr Ser Pro Asp Gly 20 25 30

Pro Gln Thr Thr Ser Ser Thr Leu Leu Val Pro Val Pro Asn Leu Asp 35 40 45

Arg Ser Gly Pro His Gly Pro Gly Thr Ser Gly Gly Pro Arg Ser His 50 55 60

Gly Trp Lys Asp Ala Phe Gln Trp Met Ser Ser Arg Val Ser Pro Asn 65 70 75 80

Thr Leu Trp Asp Ala Ile Ser Trp Gly Thr Leu Ala Val Leu Ala Leu 85 90 95

Gln Len Ala Arg Gln Ile His Phe Gln Ala Ser Leu Pro Ala Gly Pro

|            |            |            |            |            |            |            |            |            |            |            |            |            |            | _          |                 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------------|
|            |            |            | 100        |            |            |            |            | 105        |            |            |            |            | 110        |            |                 |
| Gln        | Arg        | Val<br>115 | Glu        | His        | Cys        | Ser        | Trp<br>120 | His        | Ser        | Pro        | Leu        | Asp<br>125 | Arg        | Phe        | Phe             |
| Ser        | Ser<br>130 | Pro        | Leu        | Trp        | His        | Pro<br>135 | Суѕ        | Ser        | Ser        | Leu        | Arg<br>140 | Gln        | His        | Ile        | Leu             |
| Pro<br>145 | Ser        | Pro        | Asp        | Gly        | Pro<br>150 | Ala        | Pro        | Arg        | His        | Thr<br>155 | Gly        | Leu        | Arg        | Glu        | Pro<br>160      |
| Arg        | Leu        | Gly        | Xaa        | Glu<br>165 | Glu        | Ala        | Ser        | Ala        | Gln<br>170 | Pro        | Arg        | Asn        | Phe        | Ser<br>175 | His             |
| Asn        | Ser        | Leu        | Arg<br>180 | Gly        | Ala        | Arg        | Pro        | Gln<br>185 | Asp        | Pro        | Ser        | Glu        | Glu<br>190 | Gly        | Pro             |
| Gly        | Asp        | Phe<br>195 | Gly        | Phe        | Leu        | His        | Ala<br>200 | Ser        | Ser        | Ser        | Ile        | Glu<br>205 | Ser        | Glu        | Ala             |
| Lys        | Pro<br>210 | Ala        | Gln        | Pro        | Gln        | Pro<br>215 | Thr        | Gly        | Glu        | Lys        | Glu<br>220 | Gln        | Asp        | Lys        | Ser             |
| Lys<br>225 | Thr        | Leu        | Ser        | Leu        | Glu<br>230 | Glu        | Ala        | Val        | Thr        | Ser<br>235 | Ile        | Gln        | Gln        | Leu        | Phe<br>240      |
| Gln        | Leu        | Ser        | Val        | Ser<br>245 | Ile        | Xaa        | Phe        | Asn        | Phe<br>250 | Leu        | Gly        | Thr        | Glu        | Asn<br>255 | Met             |
| Lys        | Ser        | Gly        | Asp<br>260 | His        | Thr        | Ala        | Ala        | Phe<br>265 | Ser        | Tyr        | Phe        | Gln        | Lys<br>270 | Ala        | Ala             |
| Ala        | Arg        | Gly<br>275 | _          | Ser        | Lys        | Ala        | Gln<br>280 | Tyr        | Asn        | Ala        | Gly        | Leu<br>285 | Cys        | His        | Glu             |
| His        | Gly<br>290 | Arg        | Gly        | Thr        | Pro        | Arg<br>295 |            | Ile        | Ser        | Lys        | Ala<br>300 | Val        | Leu        | Tyr        | Tyr             |
| Gln<br>305 | Leu        | Ala        | Ala        | Ser        | Gln<br>310 | Gly        | His        | Ser        | Leu        | Ala<br>315 |            | Tyr        | Arg        | Tyr        | Ala<br>320      |
| Arg        | Cys        | Leu        | Leu        | Arg<br>325 | Asp        | Pro        | Ala        | Ser        | Ser<br>330 |            | Asn        | Pro        | Glu        | Arg<br>335 | Gln             |
| Arg        | Ala        | Val        | Ser<br>340 |            | Leu        | Lys        | Gln        | Ala<br>345 |            | Asp        | Ser        | Gly        | Leu<br>350 |            | Glu             |
| Ala        | Gln        | Ala<br>355 |            | Leu        | Gly        | Val        | Leu<br>360 |            | Thr        | Lys        | Glu        | Pro<br>365 |            | Leu        | Asp             |
| Glu        | Gln<br>370 |            | Ala        | . Val      | Lys        | Tyr<br>375 |            | Trp        | Leu        | Ala        | Ala<br>380 |            | Asn        | Gly        | Asp             |
| Ser<br>385 |            | Ser        | Arg        | Туг        | His<br>390 |            | Gly        | ' Ile      | cys        | 395        |            | Lys        | Gly        | Leu        | Gl <sub>3</sub> |

Ala Leu Gly Asn Glu Ala Ala Gln Glu Arg Leu Arg Ala Leu Phe Ser

Vál Gln Arg Asn Leu Gly Glu Ala Leu Arg Cys Tyr Gln Gln Ser Ala 405 410 415

420 425 430

Met Gly Ala Ala Gly Gly Pro Ala Thr 435

<210> 1369

<211> 84

<212> PRT

<213> Homo sapiens

<400> 1369

Met Gly Leu Arg Leu Pro Pro Pro Leu Cys Trp Phe Leu Cys Leu Thr 1 5 10 15

Ser Thr Gly Gln Val Pro Met Ala Gln Ala Arg Ala Gly Val Gln Gly 20 25 30

Pro Met Asp Gly Arg Met Pro Ser Asn Gly Cys Leu Pro Val Ser Pro 35 40 45

Arg Thr Pro Tyr Gly Met Pro Tyr Leu Gly Ala Leu Trp Pro Cys Trp 50 55 60

Pro Cys Ser Trp Gln Gly Arg Ser Thr Ser Arg His Pro Cys Gln Gln 65 70 75 80

Asp Leu Ser Gly

<210> 1370

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1370

Met Val Gly Val Gln Ile Trp Thr Leu Thr Cys Cys Val Ile Leu Val

Val Val Leu Pro Phe Ser Val Pro His Ser Leu Ile Cys Arg Met Gly 20 25 30

Leu Ile Ala Thr Ser Val Leu Gln Gly His Gly Lys Ser Lys Met Ile 35 40 45

Asn Ala Thr Val Cys Leu Ala Leu Gly Leu Pro Arg Val Pro Arg Glu

Asp Gln Leu Ile Val Ser Leu Asp Pro Gln Ser Ser Glu Ser Ala Ser 65 70 75 80

Leu Glu Ala Leu Leu Lys Tyr Ser Phe Leu Gly Pro Pro Ser Leu Phe 85 90 95

Pro Ile Gln Trp Ser Gly Leu Gly Leu Ser Ile Ser Val Ser Tyr Gln
100 105 110

Phe Gln Val Thr Leu Val Pro Leu Ala Trp Gly Pro Asn Ser Gln Asp 115 120 125

Pro

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<210> 1371
<211> 53
<212> PRT
<213> Homo sapiens
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<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222× (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1371

Xaa Xaa Asp Thr Gln Gly Arg Val Arg Gly Arg His Glu Glu Trp Gly 1 5 10 15

Gly Arg Arg Trp Arg Lys Glu Gly Ser Glu Gln Arg Ala Pro Gly Met 20 25 30

Ala Trp Lys Arg Leu Ser Pro Trp Ile Leu Trp Val Gly Ala Ser Gly 35 40 45

Leu-Thr Ser Xaa Xaa 50

<210> 1372

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1372

Met Val Gly Val Gln Ile Trp Thr Leu Thr Cys Cys Val Ile Leu Val 1 5 10

Val Val Leu Pro Phe Ser Val Pro His Ser Leu Ile Cys Arg Met Gly
20 25 30

Leu Ile Ala Thr Ser Val Leu Gln Gly His Gly Lys Ser Lys Met Ile 35 40 45

Asn Ala Thr Val Cys Leu Ala Leu Gly Leu Pro Arg Val Pro Arg Glu 50 55 60

Asp Gln Leu Ile Val Ser Leu Asp Pro Gln Ser Ser Glu Ser Ala Ser 65 70 75 80

Leu Glu Ala Leu Leu Lys Tyr Ser Phe Leu Gly Pro Pro Ser Leu Phe 85 90 95

Pro Ile Gln Trp Ser Gly Leu Gly Leu Ser Ile Ser Val Ser Tyr Gln
100 105 110

Phe Gln Val Thr Leu Val Pro Leu Ala Trp Gly Pro Asn Ser Gln Asp 115 120 125

Pro

<210> 1373

<211> 117

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1373

Met Gly Phe Leu Phe Leu Leu Gly Leu Tyr Ile Ser Ser Leu Ala Ser 1 5 10 15

Cys Met Gly Gly Leu Tyr Gly Ala Pro Arg Ile Leu Gln Cys Ile Ala 20 25 30

Gln Glu Lys Val Ile Pro Ala Leu Ala Cys Leu Gly Gln Gly Lys Gly 35 40 45 .

Pro Asn Lys Thr Pro Val Ala Ala Ile Cys Leu Thr Ser Leu Val Thr 50 55 . 60

Met Ala Phe Val Phe Val Gly Gln Val Asn Val Leu Ala Pro Ile Val 65 70 75 80

Thr Ile Asn Phe Met Leu Thr Tyr Val Ala Val Asp Tyr Ser Tyr Phe 85 90 95

Ser Leu Ser Met Cys Ser Cys Ser Leu Thr Pro Val Pro Glu Pro Val

Leu Xaa Glu Gly Ala 115

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<210> 1374
<211> 98
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1374
Gln Gly Thr Pro Arg Leu Cys Thr Thr Arg Leu Leu Val Gln Arg Ala
Thr Ile Ser Val Cys Phe Ile Phe Tyr Cys Ile Ile Tyr Ser Lys Ile
             20
                                 25
Asn Asn Thr Leu Thr Cys Phe His Thr Gln Lys Ile Tyr Arg Val Lys
Ser Leu Pro Pro Ile Leu Ile Leu His Leu Leu Ser Ser Cys Leu Pro
Trp Pro Arg Gly Asn His Tyr Ser His Pro Tyr Ile Gln His Phe Phe
Met Asp Ile Gln Xaa Asn Gly Asn Val Xaa Ser His Ile Ser Leu Phe
Xaa Pro
<210> 1375
<211> 407
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1375
Met Gly Phe Leu Phe Leu Leu Gly Leu Tyr Ile Ser Ser Leu Ala Ser
                  5
                                     10
```

819

Cys Met Gly Gly Leu Tyr Gly Ala Pro Arg Ile Leu Gln Cys Ile Ala

| Gln        | Glu        | Lys<br>35  | Val        | Ile        | Pro        | Ala        | Leu<br>40  | Ala        | Cys        | Leu        | Gly        | Gln<br>45  | Gly        | Lys        | Gly        |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Pro        | Asn<br>50  | Lys        | Thr        | Pro        | Val        | Ala<br>55  | Ala        | Ile        | Суѕ        | Leu        | Thr<br>60  | Ser        | Leu        | Val        | Thr        |
| Met<br>65  | Ala        | Phe        | Va1        | Phe        | Val<br>70  | Gly        | Gln        | Val        | Asn        | Val<br>75  | Leu        | Ala        | Pro        | Ile        | Val<br>80  |
| Thr        | Ile        | Asn        | Phe        | Met<br>85  | Leu        | Thr        | Tyr        | Val        | Ala<br>90  | Val        | Asp        | Tyr        | Ser        | Туг<br>95  | Phe        |
| Ser        | Leu        | Ser        | Met<br>100 | Cla        | Ser        | Суѕ        | Ser        | Leu<br>105 | Thr        | Pro        | Val        | Pro        | Glu<br>110 | Pro        | Val        |
| Leu        | Xaa        | Glu<br>115 | Gly        | Ala        | Glu        | Gly        | Leu<br>120 | His        | Cys        | Ser        | Glu        | His<br>125 | Leu        | Leu        | Leu        |
| Glu        | Lys<br>130 | Ala        | Pro        | Ser        | Tyr        | Gly<br>135 | Ser        | Glu        | Gly        | Pro        | Ala<br>140 | Gln        | Arg        | Val        | Leu        |
| Glu<br>145 | Gly        | Thr        | Leu        | Leu        | Glu<br>150 | Phe        | Thr        | Lys        | Asp        | Met<br>155 | Asp        | Gln        | Leu        | Leu        | Gln<br>160 |
| Leu        | Thr        | Arg        | Lys        | Leu<br>165 | Glu        | Ser        | Ser        | Gln        | Pro<br>170 | Arg        | Gln        | Gly        | Glu        | Gly<br>175 | Asn        |
| Arg        | Thr        | Pro        | Glu<br>180 | Ser        | Gln        | Lys        | Arg        | Lys<br>185 | Ser        | Lys        | Lys        | Ala        | Thr<br>190 | Lys        | Gln        |
| Thr        | Leu        | Gln<br>195 | Asp        | Ser        | Phe        | Leu        | Leu<br>200 | Asp        | Leu        | Lys        | Ser        | Pro<br>205 | Pro        | Ser        | Phe        |
| Pro        | Val<br>210 | Glu        | Ile        | Ser        | Asp        | Arg<br>215 | Leu        | Pro        | Ala        | Ala        | Ser<br>220 | Trp        | Glu        | Gly        | Gln        |
| Glu<br>225 | Ser        | Суѕ        | Trp        | Asn        | Lys<br>230 | Gln        | Thr        | Ser        | Lys        | Ser<br>235 | Glu        | Gly        | Thr        | Gln        | Pro<br>240 |
| Glu        | Gly        | Thr        | Туr        | Gly<br>245 | Glu        | Gln        | Leu        | Val        | Pro<br>250 | Glu        | Leu        | Cys        | Asn        | Gln<br>255 | Ser        |
| Glu        | Ser        | Ser        | Gly<br>260 | Glu        | Asp        | Phe        | Phe        | Leu<br>265 | Lys        | Ser        | Arg        | Leu        | Gln<br>270 | Glu        | Gln        |
| Asp        | Val        | Trp<br>275 | Arg        | Arg        | Ser        | Thr        | Ser<br>280 |            | Tyr        | Thr        | His        | Met<br>285 | Суѕ        | Asn        | Pro        |
| Trp        | Val<br>290 | Ser        | Leu        | Leu        | Gly        | Ala<br>295 |            | Gly        | Ser        | Leu        | Leu<br>300 | Ile        | Met        | Phe        | Val        |
| Ile<br>305 | Gln        | Trp        | Val        | Tyr        | Thr<br>310 | Leu        | Val        | Asn        | Met        | Gly<br>315 |            | Ala        | Ala        | Ile        | Val<br>320 |
| Tyr        | Phe        | Tyr        | Ile        | Gly<br>325 | Arg        | Ala        | Ser        | Pro        | Gly<br>330 |            | His        | Leu        | Gly        | Ser<br>335 | Ala        |
| Ser        | Asn        | Phe        | Ser<br>340 | Phe        | Phe        | Arg        | Trp        | Met<br>345 | _          | Ser        | Leu        | Leu        | Leu<br>350 |            | Ser        |

Cys Arg Ser Leu Gln Ser Pro Gln Glu Gln Ile Ile Leu Ala Pro Ser 355 360 365

Leu Ala Lys Val Asp Met Glu Met Thr Gln Leu Thr Gln Glu Asn Ala 370 375 380

Asp Phe Ala Thr Arg Asp Arg Tyr His His Ser Ser Leu Val Asn Arg 385 390 395 400

Glu Gln Leu Met Pro His Tyr 405

<210> 1376

<211> 137

<212> PRT

<213> Homo sapiens

<400> 1376

Met Leu Ser Gly Arg Leu Val Leu Gly Leu Val Ser Met Ala Gly Arg

1 5 10 15

Val Cys Leu Cys Gln Gly Ser Ala Gly Ser Gly Ala Ile Gly Pro Val 20 25 30

Glu Ala Ala Ile Arg Thr Lys Leu Glu Glu Ala Leu Ser Pro Glu Val 35 40 45

Leu Glu Leu Arg Asn Glu Ser Gly Gly His Ala Val Pro Pro Gly Ser 50 55 60

Glu Thr His Phe Arg Val Ala Val Val Ser Ser Arg Phe Glu Gly Leu 65 70 75 80

Ser Pro Leu Gln Arg His Arg Leu Val His Ala Ala Leu Ala Glu Glu 85 90 95

Leu Gly Gly Pro Val His Ala Leu Ala Ile Gln Ala Arg Thr Pro Ala 100 105 110

Gln Trp Arg Glu Asn Ser Gln Leu Asp Thr Ser Pro Pro Cys Leu Gly
115 120 125

Gly Asn Lys Lys Thr Leu Gly Thr Pro 130 135

<210> 1377

<211> 143

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (47) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (58) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids Phe Gly Pro Ala Val Phe Gly Phe Gly Ser Pro Arg Gly Lys Pro Pro Gly Asn Xaa Arg Gly Gly Pro Ile Arg Val Pro Gly Phe Gly Arg Pro Arg Pro Ile Ser Ala Pro Glu Val Trp Glu Gly Arg Pro Leu Xaa Ala 40 35 Pro Arg Ser Cys Phe Arg Asn Phe Arg Xaa Arg Arg Ser Gly Gly His 55 -Ala Val Pro Pro Gly Ser Glu Thr His Phe Arg Val Ala Val Val Ser Ser Arg Phe Glu Gly Leu Ser Pro Leu Gln Arg His Arg Leu Val His Ala Ala Leu Ala Glu Glu Leu Xaa Gly Pro Val His Ala Leu Ala Ile Gln Ala Arg Thr Pro Ala Gln Trp Arg Glu Asn Ser Gln Leu Asp Thr 120 Ser Pro Pro Cys Leu Gly Gly Asn Lys Lys Thr Leu Gly Thr Pro 135

<210> 1378 <211> 137 <212> PRT <213> Homo sapiens <400> 1378

Met Leu Ser Gly Arg Leu Val Leu Gly Leu Val Ser Met Ala Gly Arg
1 5 10 15

Val Cys Leu Cys Gln Gly Ser Ala Gly Ser Gly Ala Ile Gly Pro Val 20 25 30

Glu Ala Ala Ile Arg Thr Lys Leu Glu Glu Ala Leu Ser Pro Glu Val 35 40 45

Leu Glu Leu Arg Asn Glu Ser Gly Gly His Ala Val Pro Pro Gly Ser
50 60

Glu Thr His Phe Arg Val Ala Val Val Ser Ser Arg Phe Glu Gly Leu 65 70 75 80

Ser Pro Leu Gln Arg His Arg Leu Val His Ala Ala Leu Ala Glu Glu 85 90 95

Leu Gly Gly Pro Val His Ala Leu Ala Ile Gln Ala Arg Thr Pro Ala 100 105 110

Gln Trp Arg Glu Asn Ser Gln Leu Asp Thr Ser Pro Pro Cys Leu Gly
115 120 125

Gly Asn Lys Lys Thr Leu Gly Thr Pro 130 135

<210> 1379

<211> 82

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1379

Met Ile Arg Arg Leu Val Phe Ala Ala Phe Pro Arg Leu Phe Pro Val 1 5 15

Xaa Leu Pro Ser Met Leu Thr His Trp Ala Ser Leu Ala Val Ile Pro 20 25 30 .

Thr Met Thr Ala Thr Ser Val Gly Lys Ala Pro Pro Gly Pro Leu Pro 35 40 45

Asp Ala Ser Pro Ser Leu Arg Leu Pro Ala Arg Arg Pro Asp Pro 50 55 60

Val Gly Ala Cys Arg Gly Val Arg Gly Met Ala Asp Leu Met Val Pro 65 70 75 80

Leu Pro

<210> 1380

<211> 254

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (176)

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (214)
<223> Xaa equals any of the naturally occurring L-amino acids
<230>
<221> SITE '
<222> (237)
<223> Xaa equals any of the naturally occurring L-amino acids
<230>
<221> SITE
<222> (246)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1380
Glu Phe Gly Thr Ser Leu Lys Val Arg Gly Phe Ile Leu Glu Val Ser
                                    10
Glu Thr Thr Asn Pro Pro Glu Gly Thr Asn Ser Gly His Ser Gly Met
Val Ser Ala Leu Cys Gly Leu Cys Leu Leu Gly Ser Asn Asp Ser Pro
                            40
Ala Ser Ala Ser Gln Val Ala Gly Thr Thr Gly Leu Ser Lys Ser Leu
Gly Leu Ile Glu Gly Tyr Gly Gly Arg Gly Lys Gly Gly Leu Pro Ala
Thr Leu Ser Pro Ala Glu Glu Lys Ala Lys Gly Pro His Glu Lys
Tyr Gly Tyr Asn Ser Tyr Leu Ser Glu Lys Ile Ser Leu Asp Arg Ser
Ile Pro Asp Tyr Arg Pro Thr Lys Cys Lys Glu Leu Lys Tyr Ser Lys
                            120
Asp Leu Pro Gln Ile Ser Ile Ile Phe Ile Phe Val Asn Glu Ala Leu
                       135
Ser Val Ile Leu Arg Ser Val His Ser Ala Val Asn His Thr Pro Thr
145
                    150
                                      155
His Leu Leu Lys Glu Ile Ile Leu Val Asp Asp Asn Ser Asp Glu Xaa
                                    170
Glu Leu Lys Val Pro Leu Glu Glu Tyr Val His Lys Arg Tyr Pro Gly
Led Val Lys Val Val Arg Ash Gln Lys Arg Glu Ser Leu Ile Arg Ala
                            200
                                                205
        195
```

Arg Xaa Glu Gly Trp Xaa Val Ala Thr Gly Gln Val Thr Gly Phe Phe 210 215 220

Asp Ala Pro Arg Gly Ile His Arg Leu Leu Gly Leu Xaa Arg Val Tyr 225 230 235 240

Pro Asp Pro Gly Lys Xaa Arg Lys Arg Gly Asn Leu Pro Leu 245 250

<210> 1381

<211> 74

<212> PRT

<213> Homo sapiens

<400> 1381

Gly Arg Glu Phe Glu Thr Ser Leu Asp Asn Ile Ala Arg Asp Pro Val 1 5 10 15

Cys Ile Thr Ser Leu Lys Ile Asp Trp Ala Trp Trp Cys Met Met Val 20 25 30

Val Pro Ala Thr Arg Gly Thr Gly Ala Glu Gly Ser Leu Glu Ser Arg 35 40 45

Phe Gln Ala Ala Val Gly Cys Asp Cys Val Thr Ala Leu Gln Pro Gly 50 55 60

Gln Gln Ser Glu Thr Leu Ser Leu Lys Lys

<210> 1382

<211> 273

<212> PRT

<213> Homo sapiens

<400> 1382

Met Val Ser Ala Leu Cys Gly Leu Cys Leu Leu Gly Ser Asn Asp Ser 1 5 10 15

Pro Ala Ser Ala Ser Gln Val Ala Gly Thr Thr Gly Leu Ser Lys Ser 20 25 30

Leu Gly Leu Ile Glu Gly Tyr Gly Gly Arg Gly Lys Gly Gly Leu Pro
35 40 45

Ala Thr Leu Ser Pro Ala Glu Glu Glu Lys Ala Lys Gly Pro His Glu 50 55 60

Lys Tyr Gly Tyr Asn Ser Tyr Leu Ser Glu Lys Ile Ser Leu Asp Arg 65 70 .75 80

Ser Ile Pro Asp Tyr Arg Pro Thr Lys Cys Lys Glu Leu Lys Tyr Ser 85 90 95

Lys Asp Leu Pro Gln Ile Ser Ile Ile Phe Ile Phe Val Asn Glu Ala

100 105 110

Leu Ser Val Ile Leu Arg Ser Val His Ser Ala Val Asn His Thr Pro 115 120 125

Thr His Leu Leu Lys Glu Ile Ile Leu Val Asp Asp Asn Ser Asp Glu 130 135 140

Glu Glu Leu Lys Val Pro Leu Glu Glu Tyr Val His Lys Arg Tyr Pro 145 150 155 160

Gly Leu Val Lys Val Val Arg Asn Gln Lys Arg Glu Gly Leu Ile Arg 165 170 175

Ala Arg Ile Glu Gly Trp Lys Val Ala Thr Gly Gln Val Thr Gly Phe 180 185 190

Phe Asp Ala His Val Glu Phe Thr Ala Gly Trp Ala Glu Pro Val Leu 195 200 205 .

Ser Arg Ile Gln Glu Asn Arg Lys Arg Val Ile Leu Pro Ser Ile Asp 210 215 220

Asn Ile Lys Gln Asp Asn Phe Glu Val Gln Arg Tyr Glu Asn Ser Ala 225 230 235 240

His Gly Tyr Ser Trp Glu Leu Trp Cys Met Tyr Ile Ser Pro Pro Lys 245 250 255

Asp Trp Trp Asp Ala Gly Asp Pro Ser Leu Pro Ile Ser Asp Arg Phe 260 265 270

Ser

<210> 1383

<211> 238

<212> PRT

<213> Homo sapiens

<400> 1383

Met Gln Gln Gly Pro Lys Glu Phe Ile Glu Cys Val Ser His Ile Arg
1 5 10 15

Leu Leu Ser Trp Leu Leu Gly Ser Leu Thr His Asn Ala Val Cys \$20\$ \$25\$ \$30

Pro Asn Ala Ser Ser Pro Cys Leu Pro Ile Pro Leu Asp Ala Gly Ser 40 45

His Val Ala Asp His Leu Ile Val Ile Leu Ile Gly Phe Pro Glu Gln . 50 55 60

Ser Lys Thr Ser Val Leu His Met Cys Ser Leu Phe His Ala Phe Ile 65 70 75 80

Phe Ala Gln Leu Trp Thr Val Tyr Cys Glu Gln Ser Ala Val Ala Thr 85 90 95

Asn Leu Gln Asn Gln Asn Glu Phe Ser Phe Thr Ala Ile Leu Thr Ala 100 105 110

Leu Glu Phe Trp Ser Arg Val Thr Pro Ser Ile Leu Gln Leu Met Ala 115 120 125

His Asn Lys Val Met Val Glu Met Val Cys Leu His Val Ile Ser Leu 130 135 140

Met Glu Ala Leu Gln Glu Cys Asn Ser Thr Ile Phe Val Lys Leu Ile 145 150 155 160

Pro Met Trp Leu Pro Met Ile Gln Ser Asn Ile Lys His Leu Ser Ala 165 170 175

Gly Leu Gln Leu Arg Leu Gln Ala Ile Gln Asn His Val Asn His His 180 185 190

Ser Leu Arg Thr Leu Pro Gly Ser Gly Gln Ser Ser Ala Gly Leu Ala 195 200 205

Ala Leu Arg Lys Trp Leu Gln Cys Thr Gln Phe Lys Met Ala Gln Val 210 215 220

Glu Ile Gln Ser Ser Glu Ala Ala Ser Gln Phe Tyr Pro Leu 225 230 235

<210> 1384

<211> 227

<212> PRT

<213> Homo sapiens

<400> 1384

His Glu Leu Lys Val Gly Leu Ala Gln Ile Ala Ala Met Asp Ile Ser 1 5 10 15

Arg Gly Asn His Arg Asp Asn Lys Ala Val Ile Arg Tyr Leu Pro Trp
20 25 30

Leu Tyr His Pro Pro Ser Ala Met Gln Gln Gly Pro Lys Glu Phe Ile 35 40 45

Glu Cys Val Ser His Ile Arg Leu Leu Ser Trp Leu Leu Gly Ser 50 55 60

Leu Thr His Asn Ala Val Cys Pro Asn Ala Ser Ser Pro Cys Leu Pro 65 70 75 80

Ile Pro Leu Asp Ala Gly Ser His Val Ala Asp His Leu Ile Val Ile 85 90 95

Leu Ile Gly Phe Pro Glu Gln Ser Lys Thr Ser Val Leu His Met Cys 100 105 110

Ser Leu Phe His Ala Phe Ile Phe Ala Gln Leu Trp Thr Val Tyr Cys 115 120 125

Glu Gln Ser Ala Val Ala Thr Asn Leu Gln Asn Gln Asn Glu Phe Ser 130 140

Phe Thr Ala Ile Leu Thr Ala Leu Glu Phe Trp Ser Arg Val Thr Pro 145 150 155 160

Ser Ile Leu Gln Leu Met Ala His Asn Lys Val Met Val Glu Met Val
165 170 175

Cys Leu His Val Ile Ser Leu Met Glu Ala Leu Gln Glu Cys Asn Ser 180 185 190

Thr Ile Phe Val Lys Leu Ile Pro Met Trp Leu Pro Met Ile Gln Ser 195 200 205

Asn Ile Lys His Leu Ser Ala Gly Leu Gln Phe Ala Ser Arg Leu Phe 210 220

Arg Thr Thr 225

<210> 1385

<211> 85

<212> PRT

<213> Homo sapiens

<400> 1385

Met Ser Thr Cys Cys Thr Ser Ala Leu Gln Tyr Leu Leu Ala Leu Phe  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Pro Leu Pro Ala Pro Asn Cys Val Ser Tyr Arg Ser Gln Gly Ser Ser 20 25 30

Cys Tyr Leu Leu Gln Ile Gln Lys Pro Arg Leu Arg Glu Glu Pro \$35\$

Glu Trp Pro Gln Pro Gln Ser Lys Ser Met Arg Gly Ser Met Lys Leu
50 55 60

Gly Phe Phe Pro His Cys Thr Arg Leu Leu Pro Ser Trp Gly Gly Gly 65 70 75 80

Gly Arg Cys Ser Gly

<210> 1386

<211> 110

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1386

Leu Leu Gly Cys Thr Lys Ile Gly Gly Arg Ser Asp Leu Ala Gly Pro
1 5 10 15

Trp Val Arg Xaa Arg Ser Leu Glu Pro Thr Cys Val Gly Met Asn Pro 20 25 30

Gly Ser Ala Gly Cys Pro Leu Val Ser Gly Ser Thr Ser Leu Cys Phe 35 40 45

Arg Val Leu Ile Tyr Lys Met Gly Met Met Met Met Ile Leu Trp Gly 50 55 60

Cys Asn Met Val Gln Ser His Trp Lys Ser Leu Ala Val Pro Gln Lys 65 70 75 80

Val Lys His Lys Ser Tyr His Met Ile Gln Val Trp Gln His Ile Pro \$85\$ 90 95

Val Val Pro Ala Thr Gln Glu Asp His Leu Ser Pro Gly Val
100 105 110

<210> 1387

<211> 85

<212> PRT

<213> Homo sapiens

<400> 1387

Met Ser Thr Cys Cys Thr Ser Ala Leu Gln Tyr Leu Leu Ala Leu Phe 1 5 10 15

Pro Leu Pro Ala Pro Asn Cys Val Ser Tyr Arg Ser Gln Gly Ser Ser 20 25 30

Cys Tyr Leu Leu Gln Ile Gln Lys Pro Arg Leu Arg Glu Glu Pro 35 40 45

Glu Trp Pro Gln Pro Gln Ser Lys Ser Met Arg Gly Ser Met Lys Leu 50 55 60

Gly Phe Phe Pro His Cys Thr Arg Leu Leu Pro Ser Trp Gly Gly Gly 65 70 75 80

Gly Arg Cys Ser Gly

<210> 1388

<211> 261

<212> PRT

<213> Homo sapiens

<400> 1388

Met Ala Val Lys Arg Gln Pro Gly Ala Ala Ala Leu Ala Trp Lys Asn 1 5 10 15

Pro Ile Ser Ser Trp Phe Thr Ala Met Leu His Cys Phe Gly Gly 20 25 30

Ile Leu Ser Cys Leu Leu Leu Ala Glu Pro Pro Leu Lys Phe Leu Ala 35 40 45

Asn His Thr Asn Ile Leu Leu Ala Ser Ser Ile Trp Tyr Ile Thr Phe 50 60

Phe Cys Pro His Asp Leu Val Ser Gln Gly Tyr Ser Tyr Leu Pro Val 65 70 75 80

Gln Leu Leu Ala Ser Gly Met Lys Glu Val Thr Arg Thr Trp Lys Ile 85 90 95

Val Gly Gly Val Thr His Ala Asn Ser Tyr Tyr Lys Asn Gly Trp Ile 100 105 110

Val Met Ile Ala Ile Gly Trp Ala Arg Gly Ala Gly Gly Thr Ile Ile 115 120 125

Thr Asn Phe Glu Arg Leu Val Lys Gly Asp Trp Lys Pro Glu Gly Asp 130 135 140

Glu Trp Leu Lys Met Ser Tyr Pro Ala Lys Val Thr Leu Leu Gly Ser 145 150 155 160

Val Ile Phe Thr Phe Gln His Thr Gln His Leu Ala Ile Ser Lys His 165 170 175

Asn Leu Met Phe Leu Tyr Thr Ile Phe Ile Val Ala Thr Lys Ile Thr 180 185 190

Met Met Thr Thr Gln Thr Ser Thr Met Thr Phe Ala Pro Phe Glu Asp 195 200 205

Thr Leu Ser Trp Met Leu Phe Gly Trp Gln Gln Pro Phe Ser Ser Cys 210 225 220

Glu Lys Lys Ser Glu Ala Lys Ser Pro Ser Asn Gly Val Gly Ser Leu 225 230 235 240

Ala Ser Lys Pro Val Asp Val Ala Ser Asp Asn Val Lys Lys His  $245 \hspace{1.5cm} 250 \hspace{1.5cm} 255$ 

Thr Lys Lys Asn Glu 260

<210> 1389

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1389

Ile Val Asn Pro Met Phe Cys Asn Phe His Phe Arg Ser Leu Thr Tyr

1 10 15

Phe Phe Leu Ser His Lys Asm Thr Phe Val Leu Ile Val Gly Glu Ile 20 25 30

Phe Ser Ala Phe Cys Met Phe Phe Leu Ile Phe Val Gly Leu Asn Ile 35 40 45

Leu Val Val Ile Thr Val Ile Ile Gln Gln Lys Ala Tyr Pro Phe Lys 50 55 60

Asn Phe Ser Thr Met Ser Phe Phe 65 70

<210> 1390

<211> 261

<212> PRT

<213> Homo sapiens

<400> 1390

Met Ala Val Lys Arg Gln Pro Gly Ala Ala Ala Leu Ala Trp Lys Asn 1 5 10 15

Pro Ile Ser Ser Trp Phe Thr Ala Met Leu His Cys Phe Gly Gly 20 25 30

Ile Leu Ser Cys Leu Leu Leu Ala Glu Pro Pro Leu Lys Phe Leu Ala 35 40 45

Asn His Thr Asn Ile Leu Leu Ala Ser Ser Ile Trp Tyr Ile Thr Phe 50 55 60

Phe Cys Pro His Asp Leu Val Ser Gln Gly Tyr Ser Tyr Leu Pro Val 65 70 75 80

Gln Leu Leu Ala Ser Gly Met Lys Glu Val Thr Arg Thr Trp Lys Ile 85 90 95

Val Gly Gly Val Thr His Ala Asn Ser Tyr Tyr Lys Asn Gly Trp Ile 100 105 110

Val Met Ile Ala Ile Gly Trp Ala Arg Gly Ala Gly Gly Thr Ile Ile 115 120 125

Thr Asn Phe Glu Arg Leu Val Lys Gly Asp Trp Lys Pro Glu Gly Asp 130 135 140

Glu Trp Leu Lys Met Ser Tyr Pro Ala Lys Val Thr Leu Leu Gly Ser 145 150 155 160

Val Ile Phe Thr Phe Gln His Thr Gln His Leu Ala Ile Ser Lys His 165 170 175

Asn Leu Met Phe Leu Tyr Thr Ile Phe Ile Val Ala Thr Lys Ile Thr 180 185 190

Met Met Thr Thr Gln Thr Ser Thr Met Thr Phe Ala Pro Phe Glu Asp 195 200 205

Thr Leu Ser Trp Met Leu Phe Gly Trp Gln Gln Pro Phe Ser Ser Cys 210 225 220

Glu Lys Lys Ser Glu Ala Lys Ser Pro Ser Asn Gly Val Gly Ser Leu

225 230 235 240

Ala Ser Lys Pro Val Asp Val Ala Ser Asp Asn Val Lys Lys His  $245 \\ 250 \\ 255$ 

Thr Lys Lys Asn Glu 260

<210> 1391

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1391

Met His Leu His Val Ser Val Ser Leu Ile Trp Gly Leu Leu Ser Phe 1 5 10 15

Leu Ser Leu Gln Val Cys Val Phe Val Gly Ser Ser Gln Pro Leu Leu 20 25 30

Leu Gln Cys Val Ser Gly Pro Ala Pro Phe Leu Leu Ser Leu Gly Val 35 40 45

Arg His Gln Pro Phe Trp Asp Cys Pro Thr Gly Pro Ser Arg Glu Glu 50 60

Thr Arg Leu Asn Pro Arg Ala Leu Thr Arg Pro Arg Gln Thr Cys Trp 65 70 75 80

Ser Phe Gly Trp Gln Val Ala Leu Arg Pro Ser Glu Lys Ser Pro Cys 85 90 95

Phe Ser

<210> 1392

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1392

Met His Leu His Val Ser Val Ser Leu Ile Trp Gly Leu Leu Ser Phe
1 10 15

Leu Ser Leu Gln Val Cys Val Phe Val Gly Ser Ser Gln Pro Leu Leu 20 25 30

Leu Gl<br/>n Cys Val Ser Gly Pro Ala Pro Phe Leu Leu Ser Leu Gly Val<br/> \$35\$

Arg His Gln Pro Phe Trp Asp Cys Pro Thr Gly Pro Ser Arg Glu Glu 50 55 60

Thr Arg Leu Ash Pro Arg Ala Leu Thr Arg Pro Arg Gln Thr Cys Trp 65 70 75 80

Ser Phe Gly Trp Gln Val Ala Leu Arg Pro Ser Glu Lys Ser Pro Cys 85 90 95

Phe Ser

<210> 1393

<211> 139

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (116)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (139)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1393

Met Ala Leu Tyr Glu Leu Phe Ser His Pro Val Glu Arg Xaa Tyr Arg 1 5 10 15

Ala Gly Leu Cys Ser Lys Ala Ala Leu Phe Leu Leu Leu Ala Ala Ala 20 25 30

Leu Thr Tyr Ile Pro Pro Leu Leu Val Ala Phe Arg Ser His Gly Phe 35 40 45

Trp Leu Lys Arg Thr Ala Thr Arg Ser Ser Arg Pro Cys Ala Ser Asn 50 55 60

Thr Arg Cys Cys Ser Trp Pro Cys Ser Asp Pro Lys Ala Thr Gly Ser 65 70 75 80

Ser Pro Gly Ala Arg Ser Pro Pro Ser Thr Gly Cys Lys Gly Ile Ala 85 90 95

Cys Ala Ser Arg Ser Phe Arg Gly Gly Asp Asn Ala Cys Cys Val Lys 100 105 110

Gln Asp Ser Xaa Ser Leu Cys Ile Tyr Arg Ser Asp Val Asp Ser Ser 115 120 125

Gln Asn Ser Leu Val Thr Lys Gly Ala Gly Xaa 130 135

<210> 1394

<211> 316

<212> PRT

<213> Homo sapiens

<400> 1394

Met Ala Leu Tyr Glu Leu Phe Ser His Pro Val Glu Arg Ser Tyr Arg 1 5 10 15

Ala Gly Leu Cys Ser Lys Ala Ala Leu Phe Leu Leu Ala Ala Ala 20 25 30

Leu Thr Tyr Ile Pro Pro Leu Leu Val Ala Phe Arg Ser His Gly Phe 35 40 45

Trp Leu Lys Arg Ser Ser Tyr Glu Glu Gln Pro Thr Val Arg Phe Gln 50 55 60

His Gln Val Leu Leu Val Ala Leu Leu Gly Pro Glu Ser Asp Gly Phe
65 70 75 80

Leu Ala Trp Ser Thr Phe Pro Ala Phe Asn Arg Leu Gln Gly Asp Arg 85 90 95

Leu Arg Val Pro Leu Val Ser Thr Arg Glu Glu Asp Arg Asn Gln Asp 100 105 110

Gly Lys Thr Asp Met Leu His Phe Lys Leu Glu Leu Pro Leu Gln Ser 115 120 125

Thr Glu His Val Leu Gly Val Gln Leu Ile Leu Thr Phe Ser Tyr Arg 130 . 135 140

Leu His Arg Met Ala Thr Leu Val Met Gln Ser Met Ala Phe Leu Gln 145 . 150 155 160

Ser Ser Phe Pro Val Pro Gly Ser Gln Leu Tyr Val Asn Gly Asp Leu
165 170 175

Arg Leu Gln Gln Lys Gln Pro Leu Ser Cys Gly Gly Leu Asp Ala Arg 180 185 190

Tyr Asn Ile Ser Val Ile Asn Gly Thr Ser Pro Phe Ala Tyr Asp Tyr 195 200 205

Asp Leu Thr His Ile Val Ala Ala Tyr Gln Glu Arg Asn Val Thr Thr 210 215 220

Val Leu Asn Asp Pro Asn Pro Ile Trp Leu Val Gly Arg Ala Ala Asp 225 230 235 240

Ala Pro Phe Val Ile Asn Ala Ile Ile Arg Tyr Pro Val Glu Val Ile 245 250 255

Ser Tyr Gln Pro Gly Phe Trp Glu Met Val Lys Phe Ala Trp Val Gln 260 265 270

Tyr Val Ser Ile Leu Leu Ile Phe Leu Trp Val Phe Glu Arg Ile Lys 275 280 285

Ile Phe Val Phe Gln Asn Gln Val Val Thr Thr Ile Pro Val Thr Val
290

Thr Pro Arg Gly Asp Leu Cys Lys Glu His Leu Ser 305 310 315

<210> 1395

<211> 103

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1395

Met Ala Phe Leu Leu Glu Arg Ser Gly Thr Leu Leu Ile Cys Ser Met

1 5 10 15

Trp Trp His His Gly Tyr Ser Asn Ile Thr Gly Thr Glu Gly Glu Arg
20 25 30

Arg Asn Leu Lys Arg Asn Lys Thr Asn Phe Arg Arg Phe Gln Asp Gly 35' 40 45

Arg Ile Gly Thr Ala Pro Val Tyr Ser Ser Gln Cys Glu Arg Cys Arg 50 60

Arg Trp Val Ile Ser Ala Phe Pro Thr Glu Gln Thr Xaa His Gln Lys 65 70 75 80

Ile Ile Ser His Ala Trp Leu Gly Gly Ser His Ala His Gly Ala Ser 85 90 95

Leu Ile Ala Ser Thr Ala Val

<210> 1396

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1396

Met Ala Phe Leu Leu Glu Arg Ser Gly Thr Leu Leu Ile Cys Ser Met  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Trp Trp His His Gly Tyr Ser Asn Ile Thr Gly Thr Glu Gly Glu Arg
20 25 30

Arg Asn Leu Lys Arg Asn Lys Thr Asn Phe Arg Arg Phe Gln Asp Gly 35 40 45

Arg Ile Gly Thr Ala Pro Val Tyr Ser Ser Gln Cys Glu Arg Cys Arg 50 55 60

Arg Trp Val Ile Ser Ala Phe Pro Thr Glu Gln Thr Ala His Gln Lys
65 70 75 80

Ile Ile Ser His Ala Trp Leu Gly Gly Ser His Ala His Gly Ala Ser 85 90 95

Leu Ile Ala Ser Thr Ala Val 100

<210> 1397

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1397

Met Cys Val Trp Phe Cys Leu Phe Ala Cys Leu Phe Ala Cys Leu Phe 1 5 10 15

Phe Glu Thr Glu Ser His Ser Val Ala Gln Ala Gly Val Gln Trp Leu 20 25 30

Asp Leu Ser Ser Leu Gln Gln Pro Pro Pro Pro Gly Phe Lys Cys Phe 35 40 45

Ser Cys Leu Cys Leu Ser Ser Trp Asp Tyr Arg Arg Ala Cys His 50 60

His Thr Arg Ile Ile Phe Val Phe Leu Val Glu Met Gly Phe His His 65 70 75 80

Val Asp Gln Ala Asp Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro Ala 85 90 95

Pro Ala Cys Leu Val Phe Lys Phe Leu Phe Leu Gly Ser 115 120 125

<210> 1398

<211> 112

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (91)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (106)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1398

Ala Pro Val Leu Leu Pro Ser Ser Cys Trp Gln Phe Trp Val Leu 1 5 10 15

Gly Phe Phe Phe Arg Gln Ser Leu Thr Pro Ser Pro Gly Trp Lys  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

- Tyr Ser Gly Ala Val Ser Ala His Cys Ser Leu Arg Leu Pro Gly Ser 35 40 45
- Asn Asp Pro Leu Ala Ser Ala Ser Gln Leu Ala Gly Thr Thr Gly Ala 50 55 60.
- His His His Gly Gln Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe.

  70 75 80
- His His Ile Ala Gln Ala Gly Leu Lys Leu Xaa Thr Ser Ser Asp Leu 85 90 95
- Leu Thr Ser Ala Phe Gln Ser Ala Gly Xaa Ile Tyr Ile Leu Asn Lys 100 105 110

<210> 1399

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1399

Met Cys Val Trp Phe Cys Leu Phe Ala Cys Leu Phe Ala Cys Leu Phe 1 5 10 15

Phe Glu Thr Glu Ser His Ser Val Ala Gln Ala Gly Val Gln Trp Leu 20 25 30

Asp Leu Ser Ser Leu Gln Gln Pro Pro Pro Pro Gly Phe Lys Cys Phe 35 40 45

Ser Cys Leu Cys Leu Leu Ser Ser Trp Asp Tyr Arg Arg Ala Cys His 50 55 60

His Thr Arg Ile Ile Phe Val Phe Leu Val Glu Met Gly Phe His His 65 70 75 80

Val Asp Gln Ala Asp Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro Ala 85 90 95

Leu Ala Ser Arg Ser Ala Gly Ile Thr Gly Val Ser His His Thr Pro 100 105 110

Pro Ala Cys Leu Phe Phe Lys Phe Leu Phe Leu Gly Ser 115 120 125

<210> 1400

<211> 79

<212> PRT

<213> Homo sapiens

Phe Ser Ser Arg Pro Cys Gîn Glu Ser Thr Gln Ser Leu Met Lys Pro 20 25 30

Ala Leu Glu Gln Ser Gly Ile Ser Cys Val Gly Ser Ala Val As<br/>n Met 35 40 45

Ile Arg Leu Ser Ala Ser Ala Pro Glu Arg Gly Lys Ser Trp Val Ile 50 55 60

Pro Ser Leu Ala Ala Gly Met Arg Arg Met Ser Val Thr Pro Ala 65 70 75

<210> 1401

<211> 455

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (178)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1401

Xaa Thr Gly Gln Arg Cys Glu Asn Leu Leu Glu Glu Arg Asn Cys Ser 1 5 10 15

Xaa Pro Gly Gly Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro 20 25 30

Gly Leu Ile Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe 35 40 45

Phe Cys Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys 50 55 60

Gln Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala
65 70 75 80

Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu Pro

85 90 95

Met Gln Val Gln Ser Arg Xaa Thr Pro Leu His Gln Leu Tyr Ser Ala 100 105 110

Ala Phe Ser Lys Gln Lys Leu Gln Ser Ala Pro Thr Lys Lys Pro Ala 115 120 125

Leu Pro Phe Gly Asp Leu Pro Met Gly Tyr Gln His Leu His Thr Gln 130 140

Leu Gln Tyr Glu Cys Ile Ser Pro Phe Tyr Arg Arg Leu Gly Ser Ser 145 150 155 160

Arg Arg Thr Cys Leu Arg Thr Gly Lys Trp Ser Gly Arg Ala Pro Ser 165 170 175

Cys Xaa Pro Ile Cys Gly Lys Ile Glu Asn Ile Thr Ala Pro Lys Thr 180 185 190

Gln Gly Leu Arg Trp Pro Trp Gln Ala Ala Ile Tyr Arg Arg Thr Ser 195 200 205

Gly Val His Asp Gly Ser Leu His Lys Gly Ala Trp Phe Leu Val Cys 210 215 220

Ser Gly Ala Leu Val Asn Glu Arg Thr Val Val Val Ala Ala His Cys 225 230 235 240

Val Thr Asp Leu Gly Lys Val Thr Met Ile Lys Thr Ala Asp Leu Lys
245 250 255

Val Val Leu Gly Lys Phe Tyr Arg Asp Asp Asp Arg Asp Glu Lys Thr 260 265 270

Ile Gln Ser Leu Gln Ile Ser Ala Ile Ile Leu His Pro Asn Tyr Asp 275 280 285

Pro Ile Leu Leu Asp Ala Asp Ile Ala Ile Leu Lys Leu Leu Asp Lys 290 295 300

Ala Arg Ile Ser Thr Arg Val Gln Pro Ile Cys Leu Ala Ala Ser Arg 305 310 315 320

Asp Leu Ser Thr Ser Phe Gln Glu Ser His Ile Thr Val Ala Gly Trp 325 330 335

Asn Val Leu Ala Asp Val Arg Ser Pro Gly Phe Lys Asn Asp Thr Leu 340 345 350

Arg Ser Gly Val Val Ser Val Val Asp Ser Leu Leu Cys Glu Glu Gln 355 360 365

His Glu Asp His Gly Ile Pro Val Ser Val Thr Asp Asn Met Phe Cys 370 375 380

Ala Ser Trp Glu Pro Thr Ala Pro Ser Asp Ile Cys Thr Ala Glu Thr 385 390 395 400

Gly Gly Ile Ala Ala Val Ser Phe Pro Gly Arg Ala Ser Pro Glu Pro

405 410 415

Arg Trp His Leu Met Gly Leu Val Ser Trp Ser Tyr Asp Lys Thr Cys 420 425 430

Ser His Arg Leu Ser Thr Ala Phe Thr Lys Val Leu Pro Phe Lys Asp 435 440 445

Trp Ile Glu Arg Asn Met Lys 450 455

<210> 1402

<211> 323

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (283)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (296)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (298)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1402

Met Glu Leu Gly Cys Trp Thr Gln Leu Gly Leu Thr Phe Leu Gln Leu 1 5 10 15

Leu Leu Ile Ser Ser Leu Pro Arg Glu Tyr Thr Val Ile Asn Glu Ala 20 25 30

Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys Cys Glu Tyr 35 40 45

Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu Val Val Gly Tyr 50 60

Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu Cys Asp Ser Cys Leu 65 70 75 80

Ile His Pro Gly Cys Thr Ile Phe Glu Asn Cys Lys Ser Cys Arg Asn 85 90 95

Gly Ser Trp Gly Gly Thr Leu Asp Asp Phe Tyr Val Lys Gly Phe Tyr 100 105 110

Cys Ala Glu Cys Arg Ala Gly Trp Tyr Gly Gly Asp Cys Met Arg Cys 115 120 125

Gly Gln Val Leu Arg Ala Pro Lys Gly Gln Ile Leu Leu Glu Ser Tyr 130 135 140

Pro Leu Asn Ala His Cys Glu Trp Thr Ile His Ala Lys Pro Gly Phe 145 150 155 160

Val Ile Gln Leu Arg Phe Val Met Leu Ser Leu Glu Phe Asp Tyr Met 165 170 175

Cys Gln Tyr Asp Tyr Val Glu Val Arg Asp Gly Asp Asn Arg Asp Gly 180 185 190

Gln Ile Ile Lys Arg Val Cys Gly Asn Glu Arg Pro Ala Pro Ile Gln 195 200 205

Ser Ile Gly Ser Ser Leu His Val Leu Phe His Ser Asp Gly Ser Lys 210 215 220

Asn Phe Asp Gly Phe His Ala Ile Tyr Glu Glu Ile Thr Ala Cys Ser 225 230 235 240

Ser Ser Pro Cys Phe His Asp Gly Thr Cys Val Leu Asp Lys Ala Gly 245 250 255

Ser Tyr Lys Cys Ala Cys Leu Ala Gly Tyr Thr Gly Gln Arg Cys Glu 260 265 270

Asn Leu Leu Glu Ala Gly Lys Ser Lys Ile Xaa Ala Ser Glu Asp Ser 275 280 285

Leu Ser Val Leu Glu Glu Arg Xaa Cys Xaa Asp Pro Gly Gly Pro Val 290 295 300

Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro Gly Leu Ile Asn Gly Arg 305 310 315 320

His Ala Lys

<210> 1403

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1403

Met Ala Arg Ser Trp Leu Thr Ala Thr Ser Ala Ser Arg Val Gln Ala 1 5 10 15

Ile Leu Leu Gly Leu Gln His Met Pro Pro Cys Pro Asp Tyr Phe  $20 \\ 25 \\ 30$ 

Phe Val Phe Val Val Glu Thr Gly Phe His His Val Ser Gln Ala Gly 35 40 45

Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Ser Ala Ser His Thr 50 55 60

Ala Gly Ile Thr Gly Met Ser His Arg Ser Trp Pro Leu Phe Leu Phe 65 70 75 80

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<210> 1404
<211> 121
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1404
Lys Leu Arg Leu Arg Glu Val Lys Ser Ile Ala Gln Gly His Val Ala
Arg Ile Trp Gln Ser His Asp Ser Asp Pro Gly Leu Leu Ile Leu Ile
Pro Val Ser Phe Leu Ala Tyr His Val Ala Ser Lys Asp Cys Ser Ser
                            40
                                               45
Leu Phe Thr Arg Lys Leu Phe Leu Pro Asn Leu His Leu His Leu Thr
Pro Ser Phe Leu Lys His Tyr Val Cys Val Phe Ile Ser Ile Ile Phe
                    70
Ile Val Phe Gly Ile His Val Leu Val Cys Val Trp Lys Lys Asn Leu
Phe Tyr Gln Leu Ala Leu Gly Pro Thr Trp Lys Lys Lys Ser Leu Asn
                105
Val Xaa Ala Met Tyr Ser Leu Lys Met
<210> 1405
<211> 80
<212> PRT
<213> Homo sapiens
<400> 1405
Met Ala Arg Ser Trp Leu Thr Ala Thr Ser Ala Ser Arg Val Gln Ala
                                   10
Ile Leu Leu Gly Leu Gln His Met Pro Pro Cys Pro Asp Tyr Phe
            20
Phe Val Phe Val Val Glu Thr Gly Phe His His Val Ser Gln Ala Gly
                            40
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Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Ser Ala Ser His Thr

55

Ala Gly Ile Thr Gly Met Ser His Arg Ser Trp Pro Leu Phe Leu Phe 65 70 75 80

<210> 1406

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (82)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1406

Ile Trp Met His Phe Ile Ser Phe Leu Tyr Pro Ile Ala Leu Ala Thr 1 5 10 15

Thr Ser Ser Thr Val Leu Asn Arg Ser Gly Glu Cys Gly His Pro Cys 20 25 .30

Leu Val Pro Val Leu Arg Glu Asn Ala Phe Ser Leu Ser Pro Phe Gly 35 40 45

Met Met Phe Ala Val Gly Leu Ser Tyr Met Ala Phe Phe Thr Leu Arg 50 55 60

Tyr Val Pro Ser Val Pro Ile Leu Leu Arg Val Phe Ile Ile Gln Glu 65 70 75 80

Cys Xaa Phe

<210> 1407

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1407

Met His Phe Ile Ser Phe Leu Tyr Pro Ile Ala Leu Ala Thr Thr Ser 1 5 10 15

Ser Thr Val Leu Asn Arg Ser Gly Glu Cys Gly His Pro Cys Leu Val 20 25 30

Pro Val Leu Arg Glu Asn Ala Phe Ser Leu Ser Pro Phe Gly Met Met 35 40 45

Phe Ala Val Gly Leu Ser Tyr Met Ala Phe Phe Thr Leu Arg Tyr Val
50 55 60

Pro Ser Val Pro Ile Leu Leu Arg Val Phe Ile Ile Gln Glu Cys Trp 65 70 75 80

Ile Leu Ser Ash Ala Phe Ser Ala Ser Gly Glu Met Ile Ile 85 90

<210> 1408

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1408

Met His Phe Ile Ser Phe Leu Tyr Pro Ile Ala Leu Ala Thr Thr Ser 1 10 15

Ser Thr Val Leu Asn Arg Ser Gly Glu Cys Gly His Pro Cys Leu Val 20 25 30

Pro Val Leu Arg Glu Asn Ala Phe Ser Leu Ser Pro Phe Gly Met Met 35 40 45

Phe Ala Val Gly Leu Ser Tyr Met Ala Phe Phe Thr Leu Arg Tyr Val 50 55 60

Pro Ser Val Pro Ile Leu Leu Arg Val Phe Ile Ile Gln Glu Cys Trp 65 70 75 80

Iie Leu Ser Asn Ala Phe Ser Ala Ser Gly Glu Met Ile Ile 85 90

<210> 1409

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1409

Met Ile Leu Ile Arg Lys Leu Phe Leu Arg Arg Cys His Trp Gly Gly 1 5 10 15

Trp Leu Leu Pro Pro Ala Arg Ala Ser Cys Ser Gly Lys His Ser Leu 20 25 30

Ser His Ser Cys Arg Gly Pro Arg Val Gln Arg Pro Pro His Pro Arg 35 40 45

Phe Trp Ala Gly Thr Leu Ala Pro Gly Pro Cys Pro Gly Leu Trp Cys 50 55 60

Leu Pro Gly Leu Val Gln Val Asp Val Leu Ala Ala Gly Arg Cys Asp 65 70 75 80

His Leu Ser Cys Leu Pro Pro Leu Cys Pro Gln Ala Phe Leu Leu 85 90 95

<210> 1410

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1410

Met Pro Gly Cys Val Phe Cys Phe Leu Thr Leu Leu Phe His Ser Leu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ser Val Gly Gln Tyr Cys Cys Leu Ile Cys Val Cys Phe Val Leu Tyr 20 25 30

Val Tyr Thr Gln Ile His Thr Arg Ile His Ile His Thr His Lys His  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Phe Phe Pro Trp Arg Gln Gly Ile Ala Leu Ser Pro Arg Leu Glu 50 60

Tyr Ser Ser Ala Ile Met Thr His Arg Leu Ile Ala Ala Leu Ala Ser 65 70 75 80

Gln Ala Gln Ala Ile Leu Pro Pro Gln Pro Ser Glu 85 90

<210> 1411

<211> 225

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1411

Met Ile His Val Arg His Cys Thr Pro Ile Pro Ala Leu Leu Val Cys
1 5 10 15

Cys Gly Ala Thr Ala Val Ile Met Leu Val Gly Asp Thr Tyr Thr Leu 20 25 30

Ile Asn Tyr Val Ser Phe Ile Asn Tyr Leu Cys Tyr Gly Val Thr Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Leu Gly Leu Leu Leu Arg Trp Arg Arg Pro Ala Leu His Arg Pro 50 60

Ile Xaa Val Asn Leu Leu Ile Pro Val Ala Tyr Leu Val Phe Trp Ala 65 70 75 80

Phe Leu Leu Val Phe Ser Phe Ile Ser Glu Pro Met Val Cys Gly Val
85 90 95

Gly Val Ile Ile Xaa Leu Thr Gly Val Pro Ile Phe Phe Leu Gly Val
100 105 110

Phe Trp Arg Ser Lys Pro Lys Cys Val His Arg Leu Thr Glu Ser Met 115 120 125

Thr His Trp Gly Gln Glu Leu Cys Phe Val Val Tyr Pro Gln Asp Ala 130 135 140

Pro Glu Glu Glu Glu Asn Ala Pro Ala His Pro Fro Cys Cys Leu Pro 145 150 155 160

Gln Thr Ser Pro Arg Ser His Asn Glu Ile Phe Val Glu Thr Glu Ala 165 170 175

Val Val Ser Val Tyr Met Leu Phe Ile Glu Glu Val Phe Trp Gln Lys 180 185 190

Ser Phe Val Leu Phe Phe Ser Gly Lys Lys Arg Lys Lys Ile Arg Leu 195 200 205

Ser Glu Ala Cys Phe Lys Glu Ala Leu Lys Cys Gly Leu Gly Phe Leu 210 215 220

Ser 225

<210> 1412

<211> .172

<212> PRT

<213> Homo sapiens

<400> 1412

Met Ile His Val Arg His Cys Thr Pro Ile Pro Ala Leu Leu Val Cys
1 5 10 15

Cys Gly Ala Thr Ala Val Ile Met Leu Val Gly Asp Thr Tyr Thr Leu 20 25 30

Ile Asn Tyr Val Ser Phe Ile Asn Tyr Leu Cys Tyr Gly Val Thr Ile 35 40 45

Leu Gly Leu Leu Leu Arg Trp Arg Arg Pro Ala Leu His Arg Pro 50 55 60

Ile Lys Val Asn Leu Leu Ile Pro Val Ala Tyr Leu Val Phe Trp Ala 65 70 75 80

Phe Leu Leu Val Phe Ser Phe Ile Ser Glu Pro Met Val Cys Gly Val 85 90 95

Gly Val Ile Ile Ile Leu Thr Gly Val Pro Ile Phe Phe Leu Gly Val

Phe Trp Arg Ser Lys Pro Lys Cys Val His Arg Leu Thr Glu Ser Met 115 120 125

Thr His Trp Gly Gln Glu Leu Cys Phe Val Val Tyr Pro Gln Asp Ala 130 135 140

Pro Glu Glu Glu Glu Trp Pro Leu Pro Thr Leu Pro Ala Ala Cys

145 150 ' 155 160

His Arg Gln Ala Leu Glu Ala Thr Met Arg Phe Leu 165 170

<210> 1413

<211> 225

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1413

Met Ile His Val Arg His Cys Thr Pro Ile Pro Ala Leu Leu Val Cys 1 5 10  $^{\circ}$  15

Cys Gly Ala Thr Ala Val Ile Met Leu Val Gly Asp Thr Tyr Thr Leu 20 25 30

Ile Asn Tyr Val Ser Phe Ile Asn Tyr Leu Cys Tyr Gly Val Thr Ile 35 40 45

Leu Gly Leu Leu Leu Arg Trp Arg Arg Pro Ala Leu His Arg Pro 50 55 60

Ile Xaa Val Asn Leu Leu Ile Pro Val Ala Tyr Leu Val Phe Trp Ala 65 70 75 80

Phe Leu Leu Val Phe Ser Phe Ile Ser Glu Pro Met Val Cys Gly Val 85 90 95

Gly Val Ile Ile Xaa Leu Thr Gly Val Pro Ile Phe Phe Leu Gly Val
100 105 110

Phe Trp Arg Ser Lys Pro Lys Cys Val His Arg Leu Thr Glu Ser Met 115 120 125

Thr His Trp Gly Gln Glu Leu Cys Phe Val Val Tyr Pro Gln Asp Ala 130 135 140

Pro Glu Glu Glu Asn Ala Pro Ala His Pro Pro Cys Cys Leu Pro 145 150 155 160

Gln Thr Ser Pro Arg Ser His Asn Glu Ile Phe Val Glu Thr Glu Ala 165 170 175

Val Val Ser Val Tyr Met Leu Phe Ile Glu Glu Val Phe Trp Gln Lys 180 185 190

Ser Phe Val Leu Phe Phe Ser Gly Lys Lys Arg Lys Lys Ile Arg Leu

195 200 205

Ser Glu Ala Cys Phe Lys Glu Ala Leu Lys Cys Gly Leu Gly Phe Leu 210 215 220

Ser 225

<210> 1414

<211> 67

<212> PRT

<213> Hemo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1414

Lys Asp Lys Cys Ile Leu Leu Lys Arg Gln Ser Xaa Thr His Glu Glu  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Gln Cys Lys Leu Lys Pro Asn Gln Arg Leu Gly Val Ala Ala Met Pro 20 25 30

Val Ile Pro Ala Leu Trp Glu Ala Glu Val Gly Arg Leu Leu Glu Ile 35 40 45

Arg Ser Leu Ser Leu Gly Asn Ile Val Lys Pro Cys Leu Tyr Lys Lys
50 55 60

Tyr Lys Asn 65

<210> 1415

<211> 587

<212> PRT

<213> Homo sapiens

<400> 1415

Met Arg Pro Arg Gly Leu Pro Pro Leu Leu Val Val Leu Leu Gly Cys 1 5 10 15

Trp Ala Ser Val Ser Ala Gln Thr Asp Ala Thr Pro Ala Val Thr Thr  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Glu Gly Leu Asn Ser Thr Glu Ala Ala Leu Ala Thr Phe Gly Thr Phe 35 40 45

Pro Ser Thr Arg Pro Pro Gly Thr Pro Arg Ala Pro Gly Pro Ser Ser 50 60

Gly Pro Arg Pro Thr Pro Val Thr Asp Val Ala Val Leu Cys Val Cys 65 70 75 80

Asp Leu Ser Pro Ala Gln Cys Asp Ilo Asn Cys Cys Cys Asp Pro Asp

|            |              |            |            | 85           |            |              |            |            | 90         |            |            |            |              | 95         |            |
|------------|--------------|------------|------------|--------------|------------|--------------|------------|------------|------------|------------|------------|------------|--------------|------------|------------|
| Cys        | Ser          | Ser        | Val<br>100 | Asp          | Phe :      | Ser          | Val        | Phe<br>105 | Ser        | Ala        | Cys        | Ser        | Val<br>110   | Pro '      | Val        |
| Val        | Thr          | Gly<br>115 | Asp        | Ser          | Gln        | Phe          | Cys<br>120 | Ser        | Gln        | Lys        | Ala        | Val<br>125 | Ile          | Tyr        | Ser        |
| Leu        | Asn<br>130   | Phe        | Thr        | Ala          |            | Pro<br>135   | Pro        | Gln        | Arg        | Val        | Phe<br>140 | Glu        | Leu          | Val        | Asp        |
| Gln<br>145 | Ile          | Asn        | Pro        | Ser          | Ile<br>150 | Phe          | Cys        | Ile        | His        | 11e<br>155 | Thr        | Asn        | Tyr          | Lys        | Pro<br>160 |
| Ala        | Leu          | Ser        | Phe        | Ile<br>165   | Asn        | Pro          | Glu        | Val        | Pro<br>170 | Asp        | Glu        | Asn        | Asn          | Phe<br>175 | Asp        |
| Thr        | Leu          | Met        | Lys<br>180 | Thr          | Ser        | Asp          | Gly        | Phe<br>185 | Thr        | Leu        | Asn        | Ala        | Glu<br>190   | Ser        | Tyr        |
| Val        | Ser          | Phe<br>195 | Thr        | Thr          | Lys        | Leu          | Asp<br>200 | Ile        | Pro        | Thr        | Ala        | Ala<br>205 | Lys          | Tyr        | Glu        |
| Tyr        | Gly<br>210   | Val        | Pro        | Leu          | Gln        | Thr<br>215   | Ser        | Asp        | Ser        | Phe        | Leu<br>220 | Arg        | Phe          | Pro        | Ser        |
| Ser<br>225 | Leu          | Thr        | Ser        | Ser          | Leu<br>230 | Cys          | Thr        | Asp        | Asn        | Asn<br>235 | Pro        | Ala        | Ala          | Phe        | Leu<br>240 |
| Val        | Asn          | Gln        | Ala        | Val<br>245   | Lys        | Cys          | Thr        |            | Lys<br>250 |            | Asn        | Leu        | Glu          | Gln<br>255 | Cys        |
| Glu        | Glu          | Ile        | Glu<br>260 | Ala          | Leu        | Ser          | Met        | Ala<br>265 | Phe        | Tyr        | Ser        | Ser        | Pro<br>270   | Glu        | Ile        |
| Leu        | Arg          | Val<br>275 |            | Asp          | Ser        | Arg          | Lys<br>280 | Lys        | Val        | Pro        | Ile        | Thr<br>285 | Val          | Gln        | Ser        |
| Ile        | Val<br>290   |            | Gln        | Ser          | Leu        | Asn<br>295   |            | Thr        | Leu        | Thr        | Arg<br>300 | Arg        | Glu          | Asp        | Thr        |
| Asp<br>305 |              | . Leu      | Gln        | Pro          | Thr<br>310 | Leu          | . Val      | Asn        | Ala        | 315        |            | Phe        | e Ser        | Leu        | Cys<br>320 |
| Val        | . Asr        | Val        | . Val      | . Leu<br>325 |            | Val          | . Lys      | Туг        | 330<br>330 |            | Thr        | Туг        | Thr          | 335        | Ala        |
| Gly        | Glu          | ı Val      | Thr<br>340 |              | : Ala      | . Asp        | Leu        | 345        | Phe        | e Val      | Leu        | Gly        | 7 Thr<br>350 | Val        | Ser        |
| Ser        | · Val        | Val<br>355 |            | l Pro        | Leu        | . Glr        | 360        |            | Phe        | e Glu      | ı Ile      | 365        | s Phe        | e Leu      | Gln        |
| Glu        | 1 Asr<br>370 |            | c Glı      | n Pro        | val        | . Pro<br>375 |            | ı Sei      | Gl         | y Ası      | 380        |            | у Туі        | val        | . Val      |

Gly Leu Pro Leu Ala Ala Gly Phe Gln Pro His Lys Gly Ser Gly Ile

395

405 410 415

Thr Glu Gin Asp Cys Leu Ala Leu Glu Gly Val Arg Thr Pro Val Leu 420 425 430

Phe Gly Tyr Thr Met Gln Ser Gly Cys Lys Leu Arg Leu Thr Gly Ala 435 440 445

Leu Pro Cys Gln Leu Val Ala Gln Lys Val Lys Ser Leu Leu Trp Gly 450 455 460

Gln Gly Phe Pro Asp Tyr Val Ala Pro Phe Gly Asn Ser Gln Ala Gln 465 470 475 480

Asp Met Leu Asp Trp Val Pro Ile His Phe Ile Thr Gln Ser Phe Asn 485 490 495

Arg Lys Asp Ser Cys Gln Leu Pro Gly Ala Leu Val Ile Glu Val Lys 500 505 510

Trp Thr Lys Tyr Gly Ser Leu Leu Asn Pro Gln Ala Lys Ile Val Asn 515 520 525

Val Thr Ala Asn Leu Ile Ser Ser Ser Phe Pro Glu Ala Asn Ser Gly 530 535 540

Asn Glu Arg Thr Ile Leu Ile Ser Thr Ala Val Thr Phe Val Asp Val 545 550 560

Ser Ala Pro Ala Glu Ala Gly Phe Arg Ala Pro Pro Ala Ile Asn Ala 565 570 575

Arg Leu Pro Phe Asn Phe Phe Phe Pro Phe Val 580 585

<210> 1416

<211> 157

<212> PRT

<213> Homo sapiens

<400> 1416

Met Arg Pro Arg Gly Leu Pro Pro Leu Leu Val Val Leu Leu Gly Cys
1 5 10 15

Trp Ala Ser Val Ser Ala Gln Thr Asp Ala Thr Pro Ala Val Thr Thr 20 25 30

Glu Gly Leu Asn Ser Thr Glu Ala Ala Leu Ala Thr Phe Gly Thr Phe 35 40 45

Pro Ser Thr Arg Pro Pro Gly Thr Pro Arg Ala Pro Gly Pro Ser Ser 50 55 60

Gly Pro Arg Pro Thr Pro Val Thr Asp Val Ala Val Leu Cys Val Cys 65 70 75 80

Asp Leu Ser Pro Ala Gln Cys Asp Ile Asn Cys Cys Cys Asp Pro Asp 85 90 95

Cys Ser Ser Val Asp Phe Ser Val Phe Ser Ala Cys Ser Val Pro Val 100 105 110

Val Thr Gly Asp Ser Gln Phe Cys Ser Gln Lys Ala Val Ile Tyr Ser 115 120 125

Leu Asn Phe Thr Ala Asn Pro Pro Gln Arg Val Phe Glu Leu Val Asp 130 135 140

<210> 1417

<211> 587

<212> PRT

<213> Homo sapiens

<400> 1417

Met Arg Pro Arg Gly Leu Pro Pro Leu Leu Val Val Leu Leu Gly Cys

1 10 15

Trp Ala Ser Val Ser Ala Gln Thr Asp Ala Thr Pro Ala Val Thr Thr 20 25 . 30

Glu Gly Leu Asn Ser Thr Glu Ala Ala Leu Ala Thr Phe Gly Thr Phe 35 40 45

Pro Ser Thr Arg Pro Pro Gly Thr Pro Arg Ala Pro Gly Pro Ser Ser 50 55 60

Gly Pro Arg Pro Thr Pro Val Thr Asp Val Ala Val Leu Cys Val Cys 65 70 75 80

Asp Leu Ser Pro Ala Gln Cys Asp Ile Asn Cys Cys Cys Asp Pro Asp 85 90 95

Cys Ser Ser Val Asp Phe Ser Val Phe Ser Ala Cys Ser Val Pro Val
100 105 110

Val Thr Gly Asp Ser Gln Phe Cys Ser Gln Lys Ala Val Ile Tyr Ser 115 120 125

Leu Asn Phe Thr Ala Asn Pro Pro Gln Arg Val Phe Glu Leu Val Asp 130 135 140

Gln Ile Asn Pro Ser Ile Phe Cys Ile His Ile Thr Asn Tyr Lys Pro 145 150 155 160

Ala Leu Ser Phe Ile Asn Pro Glu Val Pro Asp Glu Asn Asn Phe Asp 165 170 175

Thr Leu Met Lys Thr Ser Asp Gly Phe Thr Leu Asn Ala Glu Ser Tyr 180 185 190

Val Ser Phe Thr Thr Lys Leu Asp Ile Pro Thr Ala Ala Lys Tyr Glu 195 200 205

| Tyr        | Gly<br>210 | 7al        | Pro        | Leu        | Gln        | Thr<br>215 | Ser        | Asp        | Ser        | Phe        | Leu<br>220 | Arg        | Fhe        | Pro        | Ser        |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ser<br>225 | Leu        | Thr        | Ser        | Ser        | Leu<br>230 | Cys        | Thr        | Asp        | Asn        | Asn<br>235 | Pro        | Ala        | Ala        | Phe        | Leu<br>240 |
| Val        | Asn        | Gln        | Ala        | Val<br>245 | Lys        | Cys        | Thr        | Arg        | Lys<br>250 | Ile        | Asn        | Leu        | Glu        | Gln<br>255 | Cys        |
| Glu        | Glu        | Ile        | Glu<br>260 | Ala        | Leu        | Ser        | Met        | Ala<br>265 | Phe        | Tyr        | Ser        | Ser        | Pro<br>270 | Glu        | Ile        |
| Leu        | Arg        | Val<br>275 | Pro.       | Asp        | Ser        | Arg        | Lys<br>280 | Lys        | Val        | Pro        | Ile        | Thr<br>285 | Val        | Gln        | Ser        |
| Ile        | Val<br>290 | Ile        | Gln        | Ser        | Leu        | Asn<br>295 | Lys        | Thr        | Leu        | Thr        | Arg<br>300 | Arg        | Glu        | Asp        | Thr        |
| Asp<br>305 | Val        | Leu        | Gln        | Pro        | Thr<br>310 | Leu        | Val        | Asn        | Ala        | Gly<br>315 | His        | Phe        | Ser        | Leu        | Cys<br>320 |
| Val        | Asn        | Val        | Val        | Leu<br>325 | Glu        | Val        | Lys        | Tyr        | Ser<br>330 | Leu        | Thr        | Tyr        | Thr        | Asp<br>335 | Ala        |
| Gly        | Glu        | Val        | Thr<br>340 | Lys        | Ala        | Asp        | Leu        | Ser<br>345 | Phe        | Val        | Leu        | Gly        | Thr<br>350 | Val        | Ser        |
| Ser        | Val        | Va1<br>355 | Val        | Pro        | Leu        | Gln        | Gln<br>360 | Lys        | Phe        | Glu        | Ile        | His<br>365 | Phe        | Leu        | Gln        |
| Glu        | Asn<br>370 | Thr        | Gln        | Pro        | Val        | Pro<br>375 | Leu        | Ser        | Gly        | Asn        | Pro<br>380 | Gly        | Tyr        | Val        | Val        |
| Gly<br>385 | Leu        | Pro        | Leu        | Ala        | Ala<br>390 | Gly        | Phe        | Gln        | Pro        | His<br>395 | Lys        | Gly        | Ser        | Gly        | Ile<br>400 |
| Ile        | Gln        | Thr        | Thr        | Asn<br>405 | Arg        | Tyr        | Gly        | Gln        | Leu<br>410 | Thr        | Ile        | Leu        | His        | Ser<br>415 | Thr        |
| Thr        | Glu        | Gln        | Asp<br>420 | Cys        | Leu        | Ala        | Leu        | Glu<br>425 | Gly        | Val        | Arg        | Thr        | Pro<br>430 | Val        | Leu        |
| Phe        | Gly        | Tyr<br>435 | Thr        | Met        | Gln        | Ser        | Gly<br>440 | Суѕ        | Lys        | Leu        | Arg        | Leu<br>445 | Thr        | Gly        | Ala        |
| Leu        | Pro<br>450 | Cys        | Gln        | Leu        | Val        | Ala<br>455 | Gln        | Lys        | Val        | Lys        | Ser<br>460 | Leu        | Leu        | Trp        | Gly        |
| Gln<br>465 | Gly        | Phe        | Pro        | Asp        | Tyr<br>470 | Val        | Ala        | Pro        | Phe        | Gly<br>475 | Asn        | Ser        | Gln        | Ala        | Gln<br>480 |
| Asp        | Met        | Leu        | Asp        | Trp<br>485 | Val        | Pro        | Ile        | His        | Phe<br>490 | Ile        | Thr        | Gln        | Ser        | Phe<br>495 | Asn        |
| Arg        | Lys        | Asp        | Ser<br>500 | Cys        | Gln        | Leu        | Pro        | Gly<br>505 | Ala        | Leu        | Val        | Ile        | Glu<br>510 | Val        | Lys        |
| Trp        | Thr        | Lys<br>515 | Tyr        | Gly        | Ser        | Leu        | Leu<br>520 | Asn        | Pro        | Gln        | Ala        | Lys<br>525 | Ile        | Val        | Asn        |

Val Thr Ala Asn Leu Ile Ser Ser Ser Phe Pro Glu Ala Asn Ser Gly 530 540

Asn Glu Arg Thr Ile Leu Ile Ser Thr Ala Val Thr Phe Val Asp Val 545 550 560

Ser Ala Pro Ala Glu Ala Gly Phe Arg Ala Pro Pro Ala Ile Asn Ala 565 570 575

Arg Leu Pro Phe Asn Phe Phe Phe Pro Phe Val 580 585

<210> 1418

<211> 137

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (117)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (133)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (137)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1418

Met Val Glu Glu Pro Gly Arg Phe Leu Pro Leu Trp Leu His Ile Leu 1 5 10 15

Leu Ile Thr Val Leu Leu Val Leu Ser Gly Ile Phe Ser Gly Leu Asn 20 25 30

Leu Gly Leu Met Ala Leu Asp Pro Met Glu Leu Arg Ile Val Gln Asn 35 40 45

Cys Gly Thr Xaa Lys Glu Arg Arg Tyr Ala Arg Lys Ile Glu Pro Ile 50 55 60

Arg Arg Lys Gly Asn Tyr Leu Leu Cys Ser Leu Leu Leu Gly Asn Val 65 70 75 80

Leu Val Asn Thr Ser Leu Thr Ile Leu Leu Asp Asn Leu Ile Gly Ser 85 90 95

Gly Leu Met Ala Val Ala Ser Phe Thr Ile Gly Ile Cys His Leu Trp 100 105 110

Gly Asp Pro Thr Xaa Gly Pro Cys Ala Pro Arg His Gly Ala Trp Leu 115 120 125

Val Gly Cys Gln Xaa Pro Cys Phe Xaa 130 135

<210> 1419

<211> 157

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (90)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1419

Leu Lys Pro Phe Ser Gln Thr Pro Tyr Phe Glu Ser Pro Ser Phe Ser 1 5 10 15

Pro Ser Trp Gly Trp Arg Gln Glu Asp Met Trp Glu Ala Thr Glu Ala 20 25 30

Gly Ser Leu Cys Pro Leu Leu Cys Gly Trp Gln Gly Ser Pro Gly Leu 35 40 45

Ile His Pro Leu Met Glu Pro Gln Glu Arg Arg Ala Pro Pro Lys Gly 50 55 60

Met Gln Leu Ala Ala Pro Leu Ser His Thr Cys Asp Pro Ser Val Arg
65 70 75 80

Gly His Pro Ala Leu Ala Glu Val Ser Xaa Thr Val Leu Arg Ala Leu 85 90 95

Pro Ser Cys Glu Phe Leu Pro Trp Arg Leu Phe Pro Gly Ala Glu Ser 100 105 110

Gly Pro Ala Ala Lys Leu Gln Ala Ser Gln Gly Trp Gly Gly Cys Gly
115 120 125

Thr Lys Val His Val Gly Pro Ser Thr Gly Cys Ser Arg Ser Trp Val 130 135 140

Pro Arg Ala Trp Gln Val Lys Leu Cys Arg Pro Ser Ala 145 150 155

<210> 1420

<211> 631

<212> PRT

<213> Homo sapiens

<400> 1420

Met Lys Leu Tyr Ala Leu Cys Thr Arg Ala Gln Pro Asp Gly Pro Trp

1 5 10 15

Leu Lys Trp Thr Asp Lys Asp Ser Leu Leu Phe Met Val Glu Glu Pro Gly Arg Phe Leu Pro Leu Trp Leu His Ile Leu Leu Ile Thr Val Leu Leu Val Leu Ser Gly Ile Phe Ser Gly Leu Asn Leu Gly Leu Met Ala Leu Asp Pro Met Glu Leu Arg Ile Val Gln Asn Cys Gly Thr Glu Lys Glu Arg Arg Tyr Ala Arg Lys Ile Glu Pro Ile Arg Arg Lys Gly Asn Tyr Leu Leu Cys Ser Leu Leu Leu Gly Asn Val Leu Val Asn Thr Ser 100 105 Leu Thr Ile Leu Leu Asp Asn Leu Ile Gly Ser Gly Leu Met Ala Val 120 Ala Ser Ser Thr Ile Gly Ile Val Ile Phe Gly Glu Ile Leu Pro Gln 135 Ala Leu Cys Ser Arg His Gly Leu Ala Val Gly Ala Asn Thr Ile Leu 150 155 Leu Thr Lys Phe Phe Met Leu Leu Thr Phe Pro Leu Ser Phe Pro Ile 165 170 Ser Lys Leu Leu Asp Phe Phe Leu Gly Gln Glu Ile Arg Thr Val Tyr Asn Arg Glu Lys Leu Met Glu Met Leu Lys Val Thr Glu Pro Tyr Asn Asp Leu Val Lys Glu Glu Leu Asn Met Ile Gln Gly Ala Leu Glu Leu 215 Arg Thr Lys Thr Val Glu Asp Ile Met Thr Gln Leu Gln Asp Cys Phe 230 235 Met Ile Arg Ser Asp Ala Ile Leu Asp Phe Asn Thr Met Ser Glu Ile 250 Met Glu Ser Gly Tyr Thr Arg Ile Pro Val Phe Glu Asp Glu Gln Ser 260 Asn Ile Val Asp Ile Leu Tyr Val Lys Asp Leu Ala Phe Val Asp Pro Asp Asp Cys Thr Pro Leu Lys Thr Ile Thr Arg Phe Tyr Asn His Pro Val His Phe Val Phe His Asp Thr Lys Leu Asp Ala Met Leu Glu Glu 310 Phe Lys Lys Gly Lys Ser His Leu Ala Ile Val Gln Lys Val Asn Asn 325 330

| Glu        | Gly        | Glu        | Gly<br>340 | Asp        | Pro        | Phe        | Tyr        | Glu<br>345 | Val        | Leu        | Gly        | Leu        | Val<br>350 | Thr        | Leu        |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Glu        | Asp        | Val<br>355 | ſle        | Glu        | Glu        | Ile        | Ile<br>360 | Lys        | Ser        | Glu        | Ile        | Leu<br>365 | Asp        | Glu        | Ser        |
| Asp        | Met<br>370 | Tyr        | Thr        | Asp        | Asn        | Arg<br>375 | Ser        | Arg        | Lys        | Arg        | Val<br>380 | Ser        | Glu        | Lys        | Asn        |
| Lys<br>385 | Arg        | Asp        | Phe        | Ser        | Ala<br>390 | Phe        | Lys        | Asp        | Ala        | Asp<br>395 | Asn        | Glu        | Leu        | Lys        | Val<br>400 |
| Lys        | Ile        | Ser        | Pro        | Gln<br>405 | Leu        | Leu        | Leu        | Ala        | Ala<br>410 | His        | Arg        | Phe        | Leu        | Ala<br>415 | Thr        |
|            |            |            | 420        | -          | Ser        |            |            | 425        |            |            |            |            | 430        |            |            |
|            |            | 435        |            |            | Pro        |            | 440        |            |            |            |            | 445        |            |            |            |
|            | 450        |            |            | _          | Ala        | 455        |            |            |            | -          | 460        |            |            | _          |            |
| 465        |            |            |            |            | Leu<br>470 |            |            |            |            | 475        |            |            |            |            | 480        |
|            |            |            |            | 485        | Lys        |            |            |            | 490        |            |            |            |            | 495        |            |
|            |            |            | 500        |            | Ser<br>Ser |            |            | 505        |            |            |            |            | 510        |            |            |
|            |            | 515        |            |            | Thr        |            | 520        |            |            | -          |            | 525        |            |            |            |
|            | 530        |            |            |            | Tyr        | 535        |            |            |            |            | 540        |            |            | _          |            |
| 545        |            |            |            |            | 550<br>Lys |            |            |            |            | 555        |            |            |            |            | 560        |
|            |            |            |            | 565        | Glu        |            |            |            | 570        |            |            |            |            | 575        |            |
|            |            |            | 580        |            | Asn        |            |            | 585        |            |            |            |            | 590        |            |            |
| Asp        | Glu        | 595<br>Thr | Thr        | Thr        | Leu        | Leu        | 600<br>Asn | Glu        | Arg        | Asn        | Ser        | 605<br>Leu | Leu        | His        | Lys        |
|            | 610        |            |            |            | Ala        | 615        |            |            |            |            | 620        |            |            |            |            |
| 625        |            |            |            |            | 630        |            |            |            |            |            |            |            |            |            |            |

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<210> 1421
<211> 83
<212> PRT
<213> Homo sapiens
<400> 1421
Met Gly Val Arg Va
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Met Gly Val Arg Val Trp Glu Leu Pro Ala Gln Pro Thr Gly Leu His 1 5 10 15

Leu Leu Cys Phe Cys Thr Arg Thr Met Leu Leu Ala Leu Lys Leu Pro 20 25 30

Lys Thr Lys His Ser Phe Pro Asp Pro Tyr Thr Ser Ile Leu Ser Phe 35 40 45

Ile His Pro Ala Phe Thr Glu Asn Leu Thr Leu Cys Gln Val Ser Val 50 55 60

Phe Leu Ser Ser Ser Asn Thr Glu Met Asn Gln Met Phe His Gly Val 65 70 75 80

Ser Phe Arg

<210> 1422 <211> 103 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (86) <223> Xaa equals any of the naturally occurring L-amino acids <220> <231> SITE <222> (87) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (93) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <sup>-</sup><222> (94) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1422 Met Met Ala Ser Ile Gln Ser Phe Ser Ala Met Ala Leu Leu Phe Tyr

Thr Val Phe Met Phe Val Ile Val Leu Ser Ser Leu Lys His Gly Leu 20 25 30

Phe Ser Gly Gln Trp Leu Arg Arg Val Ser Tyr Val Arg Trp Glu Gly 35 40 45

Val Phe Arg Cys Ile Pro Ile Phe Gly Met Ser Phe Ala Cys Gln Ser 50 55 60

Gln Val Leu Pro Thr Tyr Asp Ser Leu Asp Glu Pro Ser Val Lys Thr 65 70 75 80

Met Ser Ser Ile Phe Xaa Xaa Ser Leu Asn Val Val Xaa Xaa Phe Xaa 85 90 95

Val Met Val Gly Val Phe Arg 100

<210> 1423

<211> 384

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (96)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1423

Gln Arg Gln Glu Asp Glu Glu Asp Lys Pro Arg Gln Val Glu Val His
1 5 10 15

Gln Glu Pro Gly Ala Ala Val Pro Arg Gly Gln Glu Ala Pro Glu Gly 20 25 30

Lys Ala Arg Glu Thr Val Glu Asn Leu Pro Pro Leu Pro Leu Asp Pro 35 40 45

Val Leu Arg Ala Pro Gly Gly Arg Pro Ala Pro Ser Gln Asp Leu Asn 50 55 60

Gln Arg Ser Leu Glu His Ser Glu Gly Pro Val Gly Arg Asp Pro Ala 65 70 75 80

Gly Pro Pro Asp Gly Gly Pro Asp Thr Glu Pro Arg Ala Ala Gln Xaa 85 . 90 95

Lys Leu Arg Asp Gly Gln Lys Asp Ala Ala Pro Arg Ala Ala Gly Thr
100 105 110

Val Lys Glu Leu Pro Lys Gly Pro Glu Gln Val Pro Val Pro Asp Pro 115 120 125

Ala Arg Xaa Ala Gly Gly Pro Glu Glu Arg Leu Ala Glu Glu Phe Pro 130 135 140

- Gly Gln Ser Gln Asp Val Thr Gly Gly Ser Gln Asp Arg Lys Lys Pro 145 150 155 160
- Gly Lys Glu Val Ala Ala Thr Gly Thr Ser Ile Leu Lys Glu Ala Asn 165 170 175
- Trp Leu Val Ala Gly Pro Gly Ala Glu Thr Gly Asp Pro Arg Met Lys
  180 185 190
- Pro Lys Gln Val Ser Arg Asp Leu Gly Leu Ala Ala Asp Leu Pro Gly
  195 200 205
- Gly Ala Glu Gly Ala Ala Ala Gln Pro Gln Ala Val Leu Arg Gln Pro 210 215 220
- Glu Leu Arg Val Ile Ser Asp Gly Glu Gln Gly Gly Gln Gln Gly His 225 230 235 240
- Arg Leu Asp His Gly Gly His Leu Glu Met Arg Lys Ala Arg Gly Gly 245 250 255
- Asp His Val Pro Val Ser His Glu Gln Pro Arg Gly Gly Glu Asp Ala 260 265 270
- Ala Val Gln Glu Pro Arg Gln Arg Pro Glu Pro Glu Leu Gly Leu Lys 275 280 285
- Arg Ala Val Pro Gly.Gly Gln Arg Pro Asp Asn Ala Lys Pro Asn Arg 290 295 300
- Asp Leu Lys Leu Gln Ala Gly Ser Asp Leu Arg Arg Arg Arg Arg Asp 305 310 315 320
- Leu Gly Pro His Ala Glu Gly Gln Leu Ala Pro Arg Asp Gly Val Ile 325 330 335
- Ile Gly Leu Asn Pro Leu Pro Asp Val Gln Val Asn Asp Leu Arg Gly 340 345 350
- Ala Leu Asp Ala Gl<br/>n Leu Arg Gl<br/>n Ala Ala Gly Gly Ala Leu Gl<br/>n Val\$355 \$360 \$365
- Val His Ser Arg Gln Leu Arg Gln Ala Pro Gly Pro Pro Glu Glu Ser 370 375 380

<210> 1424

<211> 973

<212> PRT

<213> Homo sapiens

<400> 1424

Met Met Ala Ser Ile Gln Ser Phe Ser Ala Met Ala Leu Leu Phe Tyr

| 1          |            |            |            | 5          |            |            |            |            | 10         |            |            |            |            | 15         |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Thr        | Val        | Phe        | Меt<br>20  | Phe        | Val        | Ile        | Val        | Leu<br>25  | Ser        | Ser        | Leu        | Lys        | His<br>30  | Gly        | Leu        |
| Phe        | Ser        | Gly<br>35  | Gln        | Trp        | Leu        | Arg        | Arg<br>40  | Val        | Ser        | Tyr        | Val        | Arg<br>45  | Trp        | Glu        | Gly        |
| Val        | Phe<br>50  | Arg        | Cas        | Ile        | Pro        | Ile<br>55  | Phe        | Gly        | Met        | Ser        | Phe<br>60  | Ala        | Cys        | Gln        | Ser        |
| Gln<br>65  | Val        | Leu        | Pro        | Thr        | Туг<br>70  | Asp        | Ser        | Leu        | Asp        | Glu<br>75  | Pro        | Ser        | Val        | Lys        | Thr<br>80  |
| Met        | Ser        | Ser        | Ile        | Phe<br>85  | Ala        | Ser        | Ser        | Leu        | Asn<br>90  | Val        | Val        | Thr        | Thr        | Phe<br>95  | Tyr        |
| Val        | Met        | Val        | Gly<br>100 | Phe        | Phe        | Gly        | Tyr        | Val<br>105 | Ser        | Phe        | Thr        | Glu        | Ala<br>110 | Thr        | Ala        |
| Gly        | Asn        | Val<br>115 | Leu        | Met        | His        | Phe        | Pro<br>120 | Ser        | Asn        | Leu        | Val        | Thr<br>125 | Glu        | Met        | Leu        |
| Arg        | Val<br>130 | Gly        | Phe        | Met        | Met        | Ser<br>135 | Val        | Ala        | Val        | Gly        | Phe<br>140 | Pro        | Met        | Met        | Ile        |
| Leu<br>145 | Pro        | Cys        | Arg        | Gln        | Ala<br>150 | Leu        | Ser        | Thr        | Leu        | Leu<br>155 | Суз        | Glu        | Gln        | Gln        | Gln<br>160 |
| Lys        | Asp        | Gly        | Thr        | Phe<br>165 | Ala        | Ala        | Gly        | Gly        | Tyr<br>170 | Met        | Pro        | Pro        | Leu        | Arg<br>175 | Phe        |
| Lys        | Ala        | Leu        | Thr<br>180 | Leu        | Ser        | Val        | Val        | Phe<br>185 | _          | Thr        | Met        | Val        | Gly<br>190 |            | Ile        |
| Leu        | Ile        | Pro<br>195 |            | Val        | Glu        | Thr        | Ile<br>200 |            | .Gly       | Leu        | Thr        | Gly<br>205 |            | Thr        | Met        |
| Gly        | Ser<br>210 | Leu        | Ile        | Суѕ        | Phe        | Ile<br>215 |            | Pro        | Ala        | Leu        | 11e<br>220 |            | Lys        | Lys        | Ile        |
| His<br>225 |            | Asn        | Ala        | Leu        | Ser<br>230 |            | Gln        | Val        | Val        | Leu<br>235 |            | Val        | Gly        | Leu        | Gly<br>240 |
| Val        | Leu        | Val        | Val        | Ser<br>245 | Thr        | Val        | Thr        | Thr        | Leu<br>250 |            | · Val      | Ser        | Glu        | Glu<br>255 |            |
| Pro        | Glu        | Asp        | Leu<br>260 |            | . Glu      | Glu        | Ala        | Pro<br>265 |            | Gly        | Arg        | Leu        | Gly<br>270 |            | Ala        |
| Glu        | Gly        | Leu<br>275 |            | Lys        | Val        | Glu        | Ala<br>280 |            | Arg        | Leu        | . Ser      | Ala<br>285 |            | . Asp      | Pro        |
| Val        | Val<br>290 |            | val        | Ala        | i ⊝lu      | Asp<br>295 |            | 'Arg       | r Glu      | Lys        | 300        |            | : Leu      | Pro        | Lys        |
| Glu<br>305 |            | Glu        | Glu        | Leu        | 310        |            | Ala        | Gln        | Ile        | 2 Lys      |            | Pro        | Val        | . Asp      | Val<br>320 |
| Pro        | (41.7      | 2-0        | : Glu      | Acr        | Glv        | Lv≘        | Glu        | Ala        | Pro        | Sli        | ı Glu      | : Ala      | Gln        | Leu        | Ast        |

S01/11988

| WO 01/77137 |            |            |            |            |            |            |            |            |            |            |            |            | P          | PCT/U      |            |            |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|             |            |            |            |            | 325        |            |            |            |            | 330        |            |            |            |            | 335        |            |
|             | Arg        | Pro        | Gly        | Gln<br>340 | Gly        | Ile        | Ala        | Val        | Pro<br>345 | Val        | Gly        | Glu        | Ala        | His<br>350 | Arg        | His        |
|             | Glu        | Pro        | Pro<br>355 | Val        | Pro        | His        | Asp        | Lys<br>360 | Val        | Val        | Val        | Asp        | Glu<br>365 | Gly        | Gln        | Asp        |
|             | Arg        | Glu<br>370 | Val        | Pro        | Glu        | Glu        | Asn<br>375 | Lys        | Pro        | Pro        | Ser        | Arg<br>380 | His        | Ala        | Gly        | Gly        |
|             | Lys<br>385 | Ala        | Pro        | Gly        | Val        | Gln<br>390 | Gly        | Gln        | Met        | Ala        | Pro<br>395 | Pro        | Leu        | Pro        | Asp        | Ser<br>400 |
|             | Glu        | Arg        | Glu        | Lys        | Gln<br>405 | Ġ1u        | Pro        | Glu        | Gln        | Gly<br>410 | Glu        | Val        | Gly        | Lys        | Arg<br>415 | Pro        |
|             | Gly        | Gln        | Ala        | Gln<br>420 | Ala        | Leu        | Glu        | Glu        | Ala<br>425 | Gly        | Asp        | Leu        | Pro        | Glu<br>430 | Asp        | Pro        |
|             | Gln        | Lys        | Val<br>435 | Pro        | Glu        | Ala        | Asp        | Gly<br>440 | Gln        | Pro        | Ala        | Val        | Gln<br>445 | Pro        | Ala        | Lys        |
|             | Glu        | Asp<br>450 | Leu        | Gly        | Pro        | Gly        | Asp<br>455 | Arg        | Gly        | Leu        | His        | Pro<br>460 | Arg        | Pro        | Gln        | Ala        |
|             | Val<br>465 | Leu        | Ser        | Glu        | Gln        | Gln<br>470 | Asn        | Gly        | Leu        | Ala        | Val<br>475 | Gly        | Gly        | Gly        | Glu        | Lys<br>480 |
|             | Ala        | Lys        | Gly        | Gly        | Pro<br>485 | Pro        | Pro        | Glу        | Asn        | Ala<br>490 | Ala        | Gly        | Asp        | Thr        | Gly<br>495 | Gln        |
|             | Pro        | Ala        | Glu        | Asp<br>500 | Ser        | Asp        | His        | Gly        | Gly<br>505 | Lys        | Pro        | Pro        | Leu        | Pro<br>510 | Ala        | Glu        |
|             | Lys        | Pro        | Ala<br>515 | Pro        | Gly        | Pro        | Gly        | Leu<br>520 | Pro        | Pro        | Glu        | Pro        | Arg<br>525 | Glu        | Gln        | Arg        |
|             | Asp        | Val<br>530 |            | Arg        | Ala        |            | Gly<br>535 |            | Gln        | Ala        | Ala        | Ser<br>540 | Gln        | Leu        | Glu        | Glu        |
|             | Ala<br>545 | Gly        | Arg        | Ala        | Glu        | Met<br>550 | Leu        | Asp        | His        | Ala        | Val<br>555 | Leu        | Leu        | Gln        | Val        | Ile<br>560 |
|             | Lys        | Glu        | Gln        | Gln        | Val<br>565 | Gln        | Gln        | Lys        | Arg        | Leu<br>570 | Leu        | Asp        | Gln        | Gln        | Glu<br>575 | Lys        |
|             | Leu        | Leu        | Ala        | Val<br>580 | Ile        | Glu        | Glu        | Gln        | His<br>585 | Lys        | Glu        | Ile        | His        | Gln<br>590 | Gln        | Arg        |
|             | ~ 1        | ~ 3        | _          |            |            | _          | _          | _          | _          |            |            |            |            |            |            |            |

Gln Glu Asp Glu Glu Asp Lys Pro Arg Gln Val Glu Val His Gln Glu 595 600

Pro Gly Ala Ala Val Pro Arg Gly Gln Glu Ala Pro Glu Gly Lys Ala

Arg Glu Thr Val Glu Asn Leu Pro Pro Leu Pro Leu Asp Pro Val Leu 635

Arg Ala Pro Gly Gly Arg Pro Ala Pro Ser Gln Asp Leu Asn Gln Arg

645 650 655

Ser Leu Glu His Ser Glu Gly Pro Val Gly Arg Asp Pro Ala Gly Pro 660 670

Fro Asp Gly Gly Pro Asp Thr Glu Pro Arg Ala Ala Gln Gly Lys Leu 675 680 685

Arg Asp Gly Gln Lys Asp Ala Ala Pro Arg Ala Ala Gly Thr Val Lys 690 695 700

Glu Leu Pro Lys Gly Pro Glu Gln Val Pro Val Pro Asp Pro Ala Arg 705 710 715 720

Glu Ala Gly Gly Pro Glu Glu Arg Leu Ala Glu Glu Phe Pro Gly Gln 725 730 735

Ser Gln Asp Val Thr Gly Gly Ser Gln Asp Arg Lys Lys Pro Gly Lys 740 745 750

Glu Val Ala Ala Thr Gly Thr Ser Ile Leu Lys Glu Ala Asn Trp Leu 755 760 765

Val Ala Gly Pro Gly Ala Glu Thr Gly Asp Pro Arg Met Lys Pro Lys 770 780

Gln Val Ser Arg Asp Leu Gly Leu Ala Ala Asp Leu Pro Gly Gly Ala 785 790 795 800

Glu Gly Ala Ala Ala Gln Pro Gln Ala Val Leu Arg Gln Pro Glu Leu 805 810 815

Arg Val Ile Ser Asp Gly Glu Gln Gly Gly Gln Gln Gly His Arg Leu 820 825 830

Asp His Gly Gly His Leu Glu Met Arg Lys Ala Arg Gly Gly Asp His 835 840 845

Val Pro Val Ser His Glu Gln Pro Arg Gly Glu Asp Ala Ala Val 850 855 860

Gln Glu Pro Arg Gln Arg Pro Glu Pro Glu Leu Gly Leu Lys Arg Ala 865 870 875 880

Val Pro Gly Gly Gln Arg Pro Asp Asn Ala Lys Pro Asn Arg Asp Leu 885 890 895

Lys Leu Gln Ala Gly Ser Asp Leu Arg Arg Arg Arg Asp Leu Gly 900 905 910

Pro His Ala Glu Gly Gln Leu Ala Pro Arg Asp Gly Val Ile Gly Leu 915 920 925

Asn Pro Leu Pro Asp Val Gln Val Asn Asp Leu Arg Gly Ala Leu Asp 930 935 940

Ala Gln Leu Arg Gln Ala Ala Gly Gly Ala Leu Gln Val Val His Ser 945 950 950 955

Arg Gln Leu Arg Gln Ala Pro Gly Pro Pro Glu Glu Ser

965 . 970

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<210> 1425
<211> 110
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1425
Met Tyr Leu Gln Ile Pro Val Lys His Met Leu His Ser Gly Tyr Gln
Ala Thr Phe Phe Ser Pro Lys Ile Gly Cys Ser Ser Ile Leu Val Phe
Val Cys Leu Leu Val Phe Leu Arg Gln Ser Leu Ala Leu Leu Pro Arg
Leu Glu Tyr Ser Gly Ala Ile Leu Ala His Cys Asn Leu His Leu Leu
Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Pro Val Ala Gly Ile Thr
Gly Met His His His Thr Gln Leu Xaa Phe Cys Thr Phe Ser Arg Xaa
                 85
                                     90
Gly Ile Tyr Gln Leu Ala Ser Xaa Ser Pro Asn Pro Asp Leu
            100
<210> 1426
<211> 57
<212> PRT
<213> Homo sapiens
<400> 1426
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Phe Asn Thr Pro Lys Ile Phe Phe Gly Thr Tyr His Arg Gln Gly Thr

Leu Ile Ser Thr Gly Asp Thr Ile Ser Cys Leu Gly Leu Leu Cys Ser

Ser Ala Ala Arg Glu Gly Ile Ala Ile Cys Arg Ile Leu Lys Lys His  $40 \hspace{1cm} 45$ 

Lys His Lys Gly Ala Lys Leu Tyr Ile 50 55

<210> 1427

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1427

Met Leu His Ser Gly Tyr Gln Ala Thr Phe Phe Ser Pro Lys Ile Gly
1 5 10 15

Cys Ser Ser Ile Leu Val Phe Val Cys Leu Leu Val Phe Leu Arg Gln \$20\$

Ser Leu Ala Leu Leu Pro Arg Leu Glu Tyr Ser Gly Ala Ile Leu Ala 35 40 45

His Cys Asn Leu His Leu Leu Gly Ser Ser Asp Ser Pro Ala Ser Ala 50 55 60

Ser Pro Val Ala Gly Ile Thr Gly Met His His Thr Gln Leu Phe 65 70 75 80

Phe Cys Thr Phe Ser Arg Asp Gly Ile Leu Pro Cys Trp Pro Gly Trp  $85 \ 90 \ 95$ 

Ser Pro Thr Pro Asp Leu Arg Gln Ser Thr Leu Leu Ser Leu Pro Lys 100 105 110

Cys Trp Asp Tyr Arg His Glu Pro Leu Arg Pro Ala Gln Ala Phe 115 120 125

<210> 1428

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1428

Met Phe Ile Pro Gln Leu Pro Ala Leu Gly Leu Thr Ser Leu Met Met

1 5 10 15

Ala Ile Ser Leu Asn Val Ser Val Ser Gln Gly Leu Ser Ser Ala Cys 20 25 30

Met His Leu Arg Met Gln Ala Cys Lys Pro Thr Arg Val Gln Ala Lys 40 45

Val Leu Gly Asp Trp Val Gln Glu Asn His Val Ile Glu Asn Gly Ala 50 55 60

Thr Leu Arg Pro Trp Gln Asp Pro Leu His Asp Lys Tyr Arg Met Lys 65 70 75 80

```
<210> 1429
<211> 73
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1429
His Phe Ser Phe Trp Phe Ile His Phe Pro His Phe His Leu Lys Ile
Leu Thr Lys Cys Leu Ala Glu Phe Ser Lys Tyr Asn Asn Phe Thr Leu
Pro Ala Asp Asn Glu Xaa Ile Arg Val Gln Asn Pro Phe Gln Leu Ser
             40
Lys His Leu Leu Ser Leu Tyr Phe Val Ser Asp Thr Gly Val Lys Phe
Trp Lys Cys Lys Arg Asn Leu His Leu
                    70
<210> 1430
<211> 80
<212> PRT
<213> Homo sapiens
<400> 1430
Met Phe Ile Pro Gln Leu Pro Ala Leu Gly Leu Thr Ser Leu Met Met
Ala Ile Ser Leu Asn Val Ser Val Ser Gln Gly Leu Ser Ser Ala Cys
Met His Leu Arg Met Gln Ala Cys Lys Pro Thr Arg Val Gln Ala Lys
Val Leu Gly Asp Trp Val Gln Glu Asn His Val Ile Glu Asn Gly Ala
Thr Leu Arg Pro Trp Gln Asp Pro Leu His Asp Lys Tyr Arg Met Lys
```

```
<210> 1431
<211> 26
<212> PRT
<213> Hcmo sapiens
<400> 1431
Met Leu Arg Trp His Leu Trp Ser Trp Phe Cys Trp Phe Cys Leu Ser
                                      1.0
Glu Ala Gly Val Leu Leu Asp Leu Pro Thr
<210> 1432
<211> 84
<212> PRT
<213> Homo sapiens
<2220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<0220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
Xaa Met Ser Arg Gln His Arg Leu Asn Pro His Gly Pro Asp Pro Ala
Ala Pro His Arg Ala Cys Arg Leu Xaa Ser Pro Arg Gln Val Thr Trp
             2.0
                                  25
                                                      3.0
Leu Thr Pro Ala Glu Ala Leu Pro Leu Xaa Pro Cys Pro Ser Gln Cys
Gly Ala His Cys Arg Gln His Gly Pro Glu Arg Glu Gly Ser Ala Xaa
```

55

70

Pro Ala Ala Leu Leu Arg Pro Gly Leu Pro Val Phe Gly His Xaa Leu

50

05

Arg Leu Ser Gln

<210> 1433

<211> 26

<212> PRT

<213> Homo sapiens

<400> 1433

Met Leu Arg Trp His Leu Trp Ser Trp Phe Cys Trp Phe Cys Leu Ser 1 5 10 15

Glu Ala Gly Val Leu Leu Asp Leu Pro Thr 20 25

<210> 1434

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1434

Met Ala Leu Arg Met Leu Trp Ala Gly Gln Ala Lys Gly Ile Leu Gly  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Gly Trp Gly Ile Ile Cys Leu Val Met Ser Leu Leu Gln His Pro 20 25 30

Gly Val Tyr Ser Lys Cys Tyr Phe Gln Ala Gln Ala Pro Cys His Tyr 35 40 45

Glu Gly Lys Tyr Phe Thr Leu Gly Glu Ser Trp Leu Arg Lys Asp Cys 50 60

Phe His Cys Thr Cys Leu His Pro Val Gly Val Gly Cys Cys Asp Thr 65 70 75 80

Ser Gln His Pro Ile Asp Phe Pro Ala Gly Cys Glu Val Arg Gln Glu 85 90 95

Ala Gly Thr Cys Gln Phe Ser Leu Val Gln Lys Ser Asp Pro Arg Leu 100 105 110

Pro Cys Lys Gly Gly Gly Pro Asp Pro Glu Trp Gly Ser Ala Asn Thr
115 120 125

Pro Val Pro Gly Ala Pro Ala Pro His Ser Ser 130 135

<210> 1435

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1435

Met Ala Leu Arg Met Leu Trp Ala Gly Gln Ala Lys Gly Ile Leu Gly
1 5 10 15

- Gly Trp Gly Ile Ile Cys Leu Val Met Ser Leu Leu Leu Gln His Pro 20 25 30
- Gly Val Tyr Ser Lys Cys Tyr Phe Gln Ala Gln Ala Pro Cys His Tyr 35 40 45
- Glu Gly Lys Tyr Phe Thr Leu Gly Glu Ser Trp Leu Arg Lys Asp Cys 50 55 60
- Phe His Cys Thr Cys Leu His Pro Val Gly Val Gly Cys Cys Asp Thr 65 70 75 80
- Ser Gln His Pro Ile Asp Phe Pro Ala Gly Cys Glu Val Arg Gln Glu 85 90 95
- Ala Gly Thr Cys Gln Phe Ser Leu Val Gln Lys Ser Asp Pro Arg Leu 100 105 110
- Pro Cys Lys Gly Gly Gly Pro Asp Pro Glu Trp Gly Ser Ala Asn Thr 115 120 125
- Pro Val Pro Gly Ala Pro Ala Pro His Ser Ser 130

<210> 1436

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1436

Met Phe Asp Arg Cys Arg Val Thr Ser Cys Ser Cys Thr Cys Gly Ala
1 5 10 15

Gly Ala Lys Trp Cys Thr His Val Val Ala Leu Cys Leu Phe Arg Ile 20 25 30

His Asn Ala Ser Ala Val Cys Leu Arg Ala Pro Val Ser Glu Ser Leu 35 40 45

Ser Arg Leu Gln Arg Asp Gln Leu Gln Lys Phe Ala Gln Tyr Leu Ile 50 55 60

Ser Glu Leu Pro Gln Gln Val Gly Glu Val Gly Thr Pro Ser Cys Asn 65 70 75 80

<210> 1437

<211> 145

<212> FRT

<113> Homo sapiens

<400> 1437

Asp Pro Ser Gly Ser Phe Met Gly Arg Ser Val Met Met Arg Ile Leu
1 5 10 15

Gly Ser Pro Val Phe Pro Met His Asp Thr Ser Val Cys Leu Thr 20 25 30

Tyr Pro Asn Phe Tyr Thr Val Val Ser Pro Thr Gly Ser Arg Pro Pro 35 40 45

Ser Arg Asn Trp Asn Ser Glu Thr Pro Gly Asp Glu Glu Leu Gly Phe 50 60

Glu Ala Ala Val Ala Ala Leu Gly Met Lys Thr Thr Val Ser Glu Ala 65 70 75 80

Glu His Pro Leu Leu Cys Glu Gly Thr Arg Arg Glu Lys Gly Asp Leu 85 90 95

Ala Leu Ala Leu Met Ile Thr Tyr Lys Asp Asp Gln Ala Lys Leu Lys 100 105 110

Lys Lys Ile Ser Arg Ala Trp Trp Arg Ala Pro Val Val Pro Ala Thr
115 120 125

Arg Glu Ala Glu Val Gly Glu Leu Leu Glu Pro Arg Ser Leu Arg Leu 130 135 140

Gln 145

<210> 1438

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1438

Met Phe Asp Arg Cys Arg Val Thr Ser Cys Ser Cys Thr Cys Gly Ala
1 5 10 15

Gly Ala Lys Trp Cys Thr His Val Val Ala Leu Cys Leu Phe Arg Ile 20 25 30

His Asn Ala Ser Ala Val Cys Leu Arg Ala Pro Val Ser Glu Ser Leu 35 40 45

Ser Arg Leu Gln Arg Asp Gln Leu Gln Lys Phe Ala Gln Tyr Leu Ile 50 60

Ser Glu Leu Pro Gln Gln Val Gly Glu Val Gly Thr Pro Ser Cys Asn 65 70 75 80

<211> 91

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1439

Met Ala Ser Gln Val Pro Ser Ser Pro Phe Gln Ser Phe Phe Val Phe

1 10 15

Vai Phe Val Phe Leu Arg Pro Ser His Ser Val Ala Gln Ala Gly Val
20 25 30

Pro Leu His Phe Tyr Phe Phe Ile Gln Gln Val Leu Ile Lys Cys Ala 35 40 45

Leu Tyr Gln Val Leu Ser Ser Xaa Leu Gly Tyr Asn Gly Asp Gln Gly 50 55 60

Asp Cys Arg Phe Trp Gln Gly Lys Leu Thr Ser Asn Thr Ala Thr Arg 65 70 75 80

His Ser Glu Thr Leu Ser Leu Leu Glu Glu Leu 85 90

<210> 1440

<211> 137

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (132)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1440

Met Ser Ala Lys Gln Val Thr Ser Gln Ser Ser Leu Ser Glu Asn Asp 1 5 10 15

Gly Phe Gln Ala Phe Val Trp Trp Leu Leu Gly Ile Gly Ala Leu Thr 20 25 30

Phe Ala Leu Leu Met Ser Ala Arg Met Gly Ile Phe Gln Glu Thr Leu 35 40 45

Tyr Lys Arg Phe Gly Lys His Ser Lys Glu Ala Leu Phe Tyr Asn His 50 55 60

Ala Leu Pro Leu Pro Gly Phe Val Phe Leu Ala Ser Asp Ile Tyr Asp 65 70 75 80

His Ala Val Leu Phe Asn Lys Ser Glu Leu Tyr Glu Ile Pro Val Ile 85 90 95

Gly Val Thr Leu Pro Ile Met Trp Phe Tyr Leu Leu Met Asn Ile Ile

100

105

110

Thr Gln Tyr Val Cys Ile Arg Gly Val Phe Ile Leu Thr Thr Gly Met 115 120 125

Arg Leu Pro Xaa Arg His Ala Arg Ser 130 135

<210> 1441

<211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1441

Pro Tyr Pro Phe Cys Xaa Pro Ser Pro Phe Pro Ser Ser Ala Ala Pro 1 5 10 15

His Ser Gln Ser Asp Ala Ala Gly Thr Thr Ile Thr Arg Ser Gly Gln 20 25 30

Val Asn Arg Asp Thr Ser Asn Ser Arg Ala Gly Leu Pro Pro Ala Phe 35 40 45

Trp Glu Gly Lys Arg Cys Ser Pro Glu Leu Ile Pro Ser Asp Ser Ala 50 55 60

Ala Arg Leu Val Gly Leu Leu Phe Pro Thr Phe Cys Phe Phe Phe 65 70 75 80

Leu Cys Lys Ser Gln Met Leu Ser Ile Ala Phe Cys Asp 85

<210> 1442

<211> 104

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1442

Met Gly Phe Ser Gly Pro Ala Leu Leu Phe Pro Ile Phe Leu Leu His  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Ser Ala Ser Ser Met Leu Ser His Thr Ser Thr Ile Val Gln Thr Asn 20 25 30

Lys Gln Thr Glu Glu Arg Lys Asp Gly Glu Phe Cys Asn Arg Ala Ala 35 40 45

Lys Ser Gln Ser Lys Gln Glu Glu Val Glu Gly Thr Lys Thr Asn Lys 50 55 60

Gln Arg Cys Leu Asp Tyr Ser Thr Val Asp Met Pro Ser Ile Leu Ala 65 70 75 80

Lys Trp Cys Leu Phe Val Cys Xaa

<210> 1443

<211> 104

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1443

Met Gly Phe Ser Gly Pro Ala Leu Leu Phe Pro Ile Phe Leu Leu His 1 5 10 15

Ser Ala Ser Ser Met Leu Ser His Thr Ser Thr Ile Val Gln Thr Asn 20 25 30

Lys Gln Thr Glu Glu Arg Lys Asp Gly Glu Phe Cys Asn Arg Ala Ala 35 40 45

Lys Ser Gln Ser Lys Gln Glu Glu Val Glu Gly Thr Lys Thr Asn Lys 50 55 60

Gln Arg Cys Leu Asp Tyr Ser Thr Val Asp Met Pro Ser Ile Leu Ala 65 70 75 80

Lys Trp Cys Leu Phe Val Cys Xaa 100

<210> 1444

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1444

Met Trp Gly Glu Pro Gly Gly Arg Val Ser Ala Leu Ala Gln Val Ser 1 5 10 15

Ala Gly Tyr Ala Pro Ser Gly Ser Gln Lys Cys Phe Leu Gln Gly Leu 20 25 30

Arg Val Leu Leu Val Val Gln Leu Ser Ala Pro His Leu Cys Pro 35 40 45

Asn Pro Asn Ser Cys Gln Val Leu Ala Ser Tyr Phe Ser Cys Leu Tyr 50 55 60

Ser Tyr Trp Asp Thr Ile Glu Ser Pro Arg Ala Val Gly Ser His Leu 65 70 75 80

Arg Gly Arg Tyr Ile Gly Ser Ser 85

<210> 1445

<211> 64

<212> PRT

<213> Homo sapiens

<400> 1445

Ser Gln Arg Ser Gly Arg Leu Arg Gln Glu Asp His Leu Arg Ser Gly 1 5 10 15

Val Gln Cys Gly Gln His Ser Lys Thr Leu Ser Leu Gln Lys Asn Leu 20 25 30

Lys Leu Ser Trp His Trp Trp Arg Met Ala Val Val Pro Ala Thr Trp 35 40 45

Glu Val Glu Val Gly Gly Ser Leu Glu Pro Arg Ser Ser Ser Leu Gln 50 55 60

<210> 1446

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1446

Met Trp Gly Glu Pro Gly Gly Arg Val Ser Ala Leu Ala Gln Val Ser 1 5 10 15

Ala Gly Tyr Ala Pro Ser Gly Ser Gln Lys Cys Phe Leu Gln Gly Leu 20 25 30

Arg Val Leu Leu Val Val Gln Leu Ser Ala Pro His Leu Cys Pro 35 40 45

Asn Pro Asn Ser Cys Gln Val Leu Ala Ser Tyr Phe Ser Cys Leu Tyr 50 55 60

Ser Tyr Trp Asp Thr Ile Glu Ser Pro Arg Ala Val Gly Ser His Leu 65 70 75 80

Arg Gly Arg Tyr Ile Gly Ser Ser

WO 01/77137

PCT/US01/11988

85

<210> 1447

<211> 82

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1447

Met Ala Ser His Ser Phe Leu Leu Asp Ile Tyr Leu Val Leu Ser Leu 1 5 10 15

Trp Lys Cys Ile Pro Gly Leu Val Gln Asp Val Phe Leu Glu Met Lys 20 25 30

Val Leu Thr Glu Ser Ala Leu Cys Lys Val Met Thr Leu Glu Pro Leu 35 40 45

Gln His Ser Val Leu Val Phe Arg Cys Trp Gln Ser Xaa Phe Gln Ala 50 60

Lys Ser Ser Arg Pro Cys Gln Ala Ser Ile Phe Ala Tyr Tyr Thr Leu 65 70 75 80

Asn Phe

<210> 1448

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1448

Met Ala Ser His Ser Phe Leu Leu Asp Ile Tyr Leu Val Leu Ser Leu.

1 5 10 15

Trp Lys Cys Ile Pro Gly Leu Val Gln Asp Val Phe Leu Glu Met Lys 20 25 30

Val Leu Thr Glu Ser Ala Leu Cys Lys Val Met Thr Leu Glu Pro Leu 35 40 45

Gln His Ser Val Leu Val Phe Arg Cys Trp Gln Ser Pro Phe Gln Ala 50 55 60

Lys Ser Ser Arg Pro Cys Gln Ala Ser Ile Phe Ala Tyr Tyr Thr Leu 65 70 75 80

Asn Phe

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<210> 1449
<211> 103
<212> PRT
<213> Homo sapiens
<400> 1449
Met Gln Ser Phe His His Pro Leu Arg Ile Leu Leu Trp Leu Pro Leu
                 5
Val Thr Lys Lys Ser Leu Cys Pro Val His Lys Thr Met Thr Gln Leu
Ser Leu Val Leu Ala Ser Leu Ser Asn Ser Leu Ser Phe Gly Tyr Pro
Gly Phe Val Arg Ala Asn Arg Gln Thr Ser Leu Ile Gly Glu Phe Leu
Gly Gly Gly Trp His Ala Phe Ala Tyr Cys Phe Leu Ser Ala Glu
Asn Ala Ser Leu Ser Leu Ala Val Ser Ala Thr Pro Pro Asp Leu Val
                 85
                                     90
Ser Leu Ile Cys Leu Ser Gln
        100
<210> 1450
<211> 50
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1450
Ala Ala Met Arg Trp Arg Trp Trp Gln Arg Leu Leu Pro Trp Arg Leu
Leu Gln Ala Arg Gly Phe Pro Gln Asn Ser Ala Pro Ser Leu Gly Leu
Xaa Ala Arg Thr Tyr Ser Gln Gly Asp Cys Ser Tyr Ser Arg Thr Ala
Leu Leu
     50
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<210> 1451 <211> 130 <212> PRT <213> Homo sapiens

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<220>
<001> SITE
<202> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<2000>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<200> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1451
Met Arg Trp Arg Trp Trp Gln Arg Leu Leu Pro Trp Arg Leu Leu Gln
Ala Arg Gly Phe Pro Gln Asn Ser Ala Pro Ser Leu Gly Leu Xaa Ala
             20
Arg Thr Tyr Ser Gln Gly Asp Cys Ser Tyr Ser Arg Thr Ala Leu Tyr
Asp Leu Leu Gly Val Pro Ser Thr Ala Thr Gln Ala Gln Ile Lys Ala
Ala Tyr Tyr Arg Gln Cys Phe Leu Tyr His Pro Asp Arg Asn Ser Gly
Ser Ala Glu Ala Ala Glu Arg Phe Thr Arg Ile Ser Gln Ala Tyr Val
Val Leu Gly Ser Ala Pro Ser Val Ala Ser Met Ile Ala Ala Tyr Ser
            100
                                105
Ala Thr Xaa Xaa Cys Ala Asp Leu Ala Xaa Gly Leu Gln Xaa Xaa Arg
        115
                            120
                                                 125
His Pro
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876

130

<210> 1452

<211> 30

<212> PRT

<213> Homo sapiens

<400> 1452

Leu Asn Pro Trp Pro Leu Ile Val Tyr Leu Cys Trp Asp Pro Lys Glu
1 5 10 15

Leu Tyr Ser Pro Cys Pro Pro Arg Pro Ala Gln Leu Ser Arg 20 25 30

<210> 1453

<211> 226

<212> PRT

<213> Homo sapiens

<400> 1453

Met Ala Ala Met Arg Trp Arg Trp Gln Arg Leu Leu Pro Trp Arg  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Leu Leu Gln Ala Arg Gly Phe Pro Gln Asn Ser Ala Pro Ser Leu Gly
20 25 30

Leu Gly Ala Arg Thr Tyr Ser Gln Gly Asp Cys Ser Tyr Ser Arg Thr 35 40 45

Ala Leu Tyr Asp Leu Leu Gly Val Pro Ser Thr Ala Thr Gln Ala Gln 50 55 60

Ile Lys Ala Ala Tyr Tyr Arg Gln Cys Phe Leu Tyr His Pro Asp Arg 65 70 75 80

Asn Ser Gly Ser Ala Glu Ala Ala Glu Arg Phe Thr Arg Ile Ser Gln 85 90 95

Ala Tyr Val Val Leu Gly Ser Ala Thr Leu Arg Arg Lys Tyr Asp Arg
100 105 110

Gly Leu Leu Ser Asp Glu Asp Leu Arg Gly Pro Gly Val Arg Pro Ser 115 120 125

Arg Thr Pro Ala Pro Asp Pro Gly Ser Pro Arg Thr Pro Pro Pro Thr 130 135 140

Ser Arg Thr His Asp Gly Ser Arg Ala Ser Pro Gly Ala Asn Arg Thr 145 150 155 160

Met Phe Asn Phe Asp Ala Phe Tyr Gln Ala His Tyr Gly Glu Gln Leu 165 170 175

Glu Arg Glu Arg Arg Leu Arg Ala Arg Arg Glu Ala Leu Arg Lys Arg 180 185 190

Gln Glu Tyr Arg Ser Met Lys Gly Leu Arg Trp Glu Asp Thr Arg Asp 195 200 205

Thr Ala Ala Ile Phe Leu Ile Phe Ser Ile Phe Ile Ile Gly Phe

210 215 220

Tyr Ile 225

<210> 1454

<211> 302

<212> PRT

<213> Homo sapiens

<400> 1454

Met Leu Val Thr Asn Arg Pro Gly Val Leu Lys Glu Pro Lys Leu Met

1 10 15

Gly Ala Ile Ser Phe Phe Ile Phe Phe Phe Thr Leu Leu Val Leu Ala 20 25 30

Arg Gln Asn Glu Tyr Tyr Cys Arg Leu Asp Phe Leu Trp Lys Lys 35 40 45

Leu Arg Glu Glu Arg Glu Glu Thr Glu Thr Met Glu Asn Leu Thr Arg 50 60

Leu Leu Leu Glu Asn Val Leu Pro Ala His Val Ala Pro Gln Phe Ile
65 70 75 80

Gly Gln Asn Arg Arg Asn Glu Asp Leu Tyr His Gln Ser Tyr Glu Cys 85 90 95

Val Cys Val Leu Phe Ala Ser Val Pro Asp Phe Lys Glu Phe Tyr Ser 100 105 110

Glu Ser Asn Ile Asn His Glu Gly Leu Glu Cys Leu Arg Leu Leu Asn 115 120 125

Glu Ile Ile Ala Asp Phe Asp Glu Leu Leu Ser Lys Pro Lys Phe Ser 130 135 140

Gly Val Glu Lys Ile Lys Thr Ile Gly Ser Thr Tyr Met Ala Ala Thr 145 150 155 160

Gly Leu Asn Ala Thr Ser Gly Gln Asp Ala Gln Gln Asp Ala Glu Arg \$165\$ \$170\$ \$175\$

Ser Cys Ser His Leu Gly Thr Met Val Glu Phe Ala Val Ala Leu Gly
180 185 190

Ser Lys Leu Asp Val Ile Asn Lys His Ser Phe Asn Asn Phe Arg Leu 195 200 205

Arg Val Gly Leu Asn His Gly Pro Val Val Ala Gly Val Ile Gly Ala 210 215 220

Gln Lys Pro Gln Tyr Asp Ile Trp Gly Asn Thr Val Asn Val Ala Ser 225 230 235 240

Arg Met Glu Ser Thr Gly Val Leu Gly Lys Ile Gln Val Thr Glu Glu 245 250 - 255

Thr Ala Trp Ala Leu Gln Ser Leu Gly Tyr Thr Cys Tyr Ser Arg Gly \$260\$ \$265\$ \$270\$

Val Ile Lys Val Lys Gly Lys Gly Gln Leu Cys Thr Tyr Phe Leu Asn 275 280 285

Thr Asp Leu Thr Arg Thr Gly Pro Pro Ser Ala Thr Leu Gly 290 295 300

<210> 1455

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1455

Met Gly Pro Phe Phe Pro Tyr Ser Leu Leu Xaa Phe Phe Pro Cys Ser 1 5 10 15

Phe Ser Ser Pro Ser Phe Ile Phe Leu Leu Leu Ile Leu Lys Thr Gly 20 25 30

Cys Ser Leu Phe Pro Cys Cys Pro Ile Ser Pro Leu Cys Pro Tyr Phe 35 40 45

Ser Gln Ser Leu Ser Pro Leu Lys Ser Arg Ala Gly Arg Cys Tyr Trp
50 55 60

Cys Phe Phe Thr Leu Gly Pro Ser Ser Tyr Leu Leu 65 70 75

<210> 1456

<211> 61

<212> PRT

<213> Homo sapiens

<400> 1456

Thr Leu Thr Gln His Gln Gly Ala His Leu Gly Pro Phe Leu Asp Met
1 5 10 15

Ser Phe Leu His Tyr His Ser His Glu Pro Pro Thr Ser Gly Ile Ala 20 25 30

Asp Gln Gly Trp Gly Glu Asn Val Ala Cys Cys Phe Leu Val Leu Val 35. 40 45

Ile Ile Tyr Leu Asn Lys Gln Cys Cys Lys Tyr Leu Pro 50 55 60

<210> 1457

<211> 110

<212> PRT

<213> Homo sapiers

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1457

Met Arg Leu Ser Cys Pro Arg Xaa Pro Gly Trp Met Gly Pro Phe Phe 1 5 10 15

Pro Tyr Ser Leu Leu Ser Phe Phe Pro Cys Ser Phe Ser Ser Pro Ser 20 25 30

Phe Ile Phe Leu Leu Leu Ile Leu Lys Thr Gly Cys Ser Leu Phe Pro 35 40 45

Cys Cys Pro Ile Ser Pro Leu Cys Pro Tyr Phe Ser Gln Ser Leu Ser 50 55 60

Pro Leu Lys Ser Arg Ala Gly Arg Cys Tyr Trp Cys Phe Phe Thr Leu 65 70 75 80

Gly Pro Ser Ser Ile Phe Val Phe Ser Val Tyr Pro Leu Pro Asp Thr  $$90\$ 

Ser Phe Ser Pro Ser Leu Gly Pro Lys Ala Glu Asn Gln Cys 100 105 110

<210> 1458

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1458

Met Gly Pro Phe Phe Pro Tyr Ser Leu Leu Ser Phe Phe Pro Cys Ser 1 5 10 15

Phe Ser Ser Pro Ser Phe Ile Phe Leu Leu Leu Ile Leu Lys Thr Gly 20 25 30

Cys Ser Leu Phe Pro Cys Cys Pro Ile Ser Pro Leu Cys Pro Tyr Phe  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ser Gln Ser Leu Ser Pro Leu Lys Ser Arg Ala Gly Arg Cys Tyr Trp 50 55 60

Cys Phe Phe Thr Leu Gly Pro Ser Ser Ile Phe Val Phe Ser Val Tyr 65 70 75 80

Pro Leu Pro Asp Thr Ser Phe Ser Pro Ser Leu Gly Pro Lys Ala Glu 85 90 95

Asn Gln Cys

<210> 1459

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1459

Met Phe Ile Cys Phe Leu Thr Leu Leu Thr Pro Gly Phe Ser Leu Ser
1 5 10 15

Leu Arg Arg Lys His Tyr Leu Ile Thr Phe Arg Trp Phe Thr Tyr Ser 20 25 30

Val Lys Asn Met Cys Lys Tyr Phe Val Gln Ser Pro Val Ser Asn Lys 35 40. 45

Gln Pro Tyr Val Val Thr Asn His Leu Phe Cys His Ser Val Leu Gly 50 55 60

His Arg Ser Val Gly Met Val Ser Asp Leu Asp Ala Pro Thr Phe His 65 70 75 80

Val Arg Pro Arg Thr Val Pro Trp Ser Val Asp Ser Trp Ser Ala Leu 85 90 95

Thr Gly

<210> 1460

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1460

Met Phe Ile Cys Phe Leu Thr Leu Leu Thr Pro Gly Phe Ser Leu Ser
1 5 10 15

Leu Arg Arg Lys His Tyr Leu Ile Thr Phe Arg Trp Phe Thr Tyr Ser 20 25 30

Val Lys Asn Met Cys Lys Tyr Phe Val Gln Ser Pro Val Ser Asn Lys 35 40 45

Gln Pro Tyr Val Val Thr Asn His Leu Phe Cys His Ser Val Leu Gly 50 55 60

His Arg Ser Val Gly Met Val Ser Asp Leu Asp Ala Pro Thr Phe His 65 70 75 80

Val Arg Pro Arg Thr Val Pro Trp Ser Val Asp Ser Trp Ser Ala Leu 85 90 95

Thr Gly

<210> 1461

<211> 33

<212> PRT

<213> Homo sapiens

<400> 1461

Met Leu Val Leu Val Ser Gly Ile Ile Phe Ser Leu Ala Asp Arg Ser 1 5 10 15

Ser Ser Ser Thr Ile Arg Met Asp Ala Leu Ala Phe Leu Gln Gly Leu 20 25 30

Leu

<210> 1462

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1462

Met Leu Val Leu Val Ser Gly Ile Ile Phe Ser Leu Ala Asp Arg Ser 1 5 10 15

Ser Ser Ser Thr Ile Arg Met Asp Ala Leu Ala Phe Leu Gln Gly Leu 20 25 30

Leu Gly Thr Glu Pro Ala Glu Ala Phe His Pro His Leu Pro Ile Leu 35 40 45

Leu Pro Pro Val Met Ala Cys Val Ala Asp Pro Phe Tyr Lys Ile Ala 50 55 60

Ala Arg Gly Pro Gly Gly Ala Ala Gly Ala Gly Ala Gly Pro Val Ala 65 70 75 80

Ala Ala Gln Ala Ser Asp Ala Gly Ser

<210> 1463

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1463

Met Tyr Phe Ile Phe Thr Ser Phe Trp Ala Tyr Lys Ile Tyr Tyr Val 1 10 15

Tyr Gly Phe Met Met Leu Val Leu Val Ile Leu Cys Ile Val Thr Val

Cys Val Thr Ile Val Cys Thr Tyr Phe Leu Leu Asn Ala Glu Asp Tyr 35 40 45

Arg Trp Gln Trp Thr Ser Phe Leu Ser Ala Ala Ser Thr Ala Ile Tyr

50 55 60

Val Tyr Met Tyr Ser Phe Tyr Tyr Tyr Phe Phe Lys Thr Lys Met Tyr 65 70 75 80

Gly Leu Phe Gln Thr Ser Phe Tyr Phe Gly Tyr Met Ala Val Phe Ser 85 90 95

Thr Ala Leu Gly Ile Met Cys Gly Ala Ile Gly Tyr Met Gly Thr Ser 100 105 110

Ala Phe Val Arg Lys Ile Tyr Thr Asn Val Lys Ile Asp 115 120 125

<210> 1464

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1464

Met Tyr Phe Ile Phe Thr Ser Phe Trp Ala Tyr Lys Ile Tyr Tyr Val 1 5 10 15

Tyr Gly Phe Met Met Leu Val Leu Val Ile Leu Cys Ile Val Thr Val 20 25 30

Cys Val Thr Ile Val Cys Thr Tyr Phe Leu Leu Asn Ala Glu Asp Tyr 35 40 45

Arg Trp Gln Trp Thr Ser Phe Leu Ser Ala Ala Ser Thr Ala Ile Tyr 50 55 60

Val Tyr Met Tyr Ser Phe Tyr Tyr Tyr Phe Phe Lys Thr Lys Met Tyr 65 70 75 80

Gly Leu Phe Gln Thr Ser Phe Tyr Phe Gly Tyr Met Ala Val Phe Ser 85 90 95

Thr Ala Leu Gly Ile Met Cys Gly Ala Ile Gly Tyr Met Gly Thr Ser 100 105 110

Ala Phe Val Arg Lys Ile Tyr Thr Asn Val Lys Ile Asp 115 120 125

<210> 1465

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1465

Met Arg Gly Thr Pro Lys Thr His Leu Leu Ala Phe Ser Leu Leu Cys

1 5 10 15

Leu Leu Ser Lys Val Arg Thr Gln Leu Cys Pro Thr Pro Cys Thr Cys 20 25 30

Pro Trp Pro Pro Pro Arg Cys Pro Leu Gly Val Pro Leu Val Leu Asp 35 40 45

- Gly Cys Gly Cys Cys Arg Val Cys Ala Arg Arg Leu Gly Glu Pro Cys 50 55
- Asp Gln Leu His Val Cys Asp Ala Ser Gln Gly Leu Val Cys Gln Pro
  65 70 75 80
- Gly Ala Gly Pro Gly Gly Arg Gly Ala Leu Cys Leu Leu Ala Glu Asp 85 90 95
- Asp Ser Ser Cys Glu Val Asn Gly Arg Leu Tyr Arg Glu Gly Glu Thr
  100 105 110
- Phe Gln Pro His Cys Ser Ile Arg Cys Arg Cys Glu Asp Gly Gly Phe 115 120 125
- Thr Cys Val Pro Leu Cys Ser Glu Asp Val Arg Leu Pro Ser Trp Asp 130 135 140
- Cys Pro His Pro Arg Arg Val Glu Val Leu Gly Lys Cys Cys Pro Glu 145 150 155 160
- Trp Val Cys Gly Gln Gly Gly Gly Leu Gly Thr Gln Pro Leu Pro Ala 165 170 175
- Gln Gly Pro Gln Phe Ser Gly Leu Val Ser Ser Leu Pro Pro Gly Val
  180 185 190
- Pro Cys Pro Glu Trp Ser Thr Ala Trp Gly Pro Cys Ser Thr Thr Cys 195 200 205
- Gly Leu Gly Met Ala Thr Arg Val Ser Asn Gln Asn Arg Phe Cys Arg 210 215 220
- Leu Glu Thr Gln Arg Arg Leu Cys Leu Ser Arg Pro Cys Pro Pro Ser 225 230 235 240
- Arg Gly Arg Ser Pro Gln Asn Ser Ala Phe 245 250

<210> 1466

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1466

- Met Arg Gly Thr Pro Lys Thr His Leu Leu Ala Phe Ser Leu Leu Cys
  1 5 10 15
- Leu Leu Ser Lys Val Arg Thr Gln Leu Cys Pro Thr Pro Cys Thr Cys 20 25 30
- Pro Trp Pro Pro Pro Arg Cys Pro Leu Gly Val Pro Leu Val Leu Asp 35 40 45
- Gly Cys Gly Cys Cys Arg Val Cys Ala Arg Arg Leu Gly Glu Pro Cys

50 55 60

Asp Gln Leu His Val Cys Asp Ala Ser Gln Gly Leu Val Cys Gln Pro 65 70 75 80

Gly Ala Gly Pro Gly Gly Arg Gly Ala Leu Cys Leu Leu Ala Glu Asp 85 90 95

Asp Ser Ser Cys Glu Val Asn Gly Arg Leu Tyr Arg Glu Gly Glu Thr 100 105 110

Phe Gln Pro His Cys Ser Ile Arg Cys Arg Cys Glu Asp Gly Gly Phe 115 120 125

Thr Cys Val Pro Leu Cys Ser Glu Asp Val Arg Leu Pro Ser Trp Asp 130 135 140

Cys Pro His Pro Arg Arg Val Glu Val Leu Gly Lys Cys Cys Pro Glu 145 150 155 160

Trp Val Cys Gly Gln Gly Gly Gly Leu Gly Thr Gln Pro Leu Pro Ala 165 170 175

Gln Gly Pro Gln Phe Ser Gly Leu Val Ser Ser Leu Pro Pro Gly Val
180 185 190

Pro Cys Pro Glu Trp Ser Thr Ala Trp Gly Pro Cys Ser Thr Thr Cys 195 200 205

Glý Leu Gly Met Ala Thr Arg Val Ser Asn Gln Asn Arg Phe Cys Arg 210 215 220

Leu Glu Thr Gln Arg Arg Leu Cys Leu Ser Arg Pro Cys Pro Pro Ser 225 230 235 240

Arg Gly Arg Ser Pro Gln Asn Ser Ala Phe 245 250

<210> 1467

<211> 388

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (277)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1467

Met Met Thr Ile Thr Phe Leu Pro Tyr Thr Phe Ser Leu Met Val Thr  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Phe Pro Asp Val Pro Leu Gly Ile Phe Leu Phe Cys Val Cys Val Ile 20 25 30

Ala Ile Gly Val Val Gln Ala Leu Ile Val Gly Tyr Ala Phe His Phe
35 40 45

Pro His Leu Leu Ser Pro Gln Ile Gln Arg Ser Ala His Arg Ala Leu Tyr Arg Arg His Val Leu Gly Ile Val Leu Gln Gly Pro Ala Leu Cys 70 Phe Ala Ala Ala Ile Phe Ser Leu Phe Phe Val Pro Leu Ser Tyr Leu Leu Met Val Thr Val Ile Leu Leu Pro Tyr Val Ser Lys Val Thr Gly 105 Trp Cys Arg Asp Arg Leu Leu Gly His Arg Glu Pro Ser Ala His Pro 120 Val Glu Val Phe Ser Phe Asp Leu His Glu Pro Leu Ser Lys Glu Arg 135 Val Glu Ala Phe Ser Asp Gly Val Tyr Ala Ile Val Ala Thr Leu Leu 155 Ile Leu Asp Ile Cys Glu Asp Asn Val Pro Asp Pro Lys Asp Val Lys 170 Glu Arg Phe Ser Gly Ser Leu Val Ala Ala Leu Ser Ala Thr Gly Pro 185 Arg Phe Leu Ala Tyr Phe Gly Ser Phe Ala Thr Val Gly Leu Leu Trp Phe Ala His His Ser Leu Phe Leu His Val Arg Lys Ala Thr Arg Ala 210 215 Met Gly Leu Leu Asn Thr Leu Ser Leu Ala Phe Val Gly Gly Leu Pro 235 230 Leu Ala Tyr Gln Gln Thr Ser Ala Phe Ala Arg Gln Pro Arg Asp Glu 250 245 Leu Glu Arg Val Arg Val Ser Cys Thr Ile Ile Phe Leu Ala Ser Ile 265 Phe Gln Leu Ala Xaa Trp Thr Thr Ala Leu Leu His Gln Ala Glu Thr 280 285 Leu Gln Pro Ser Val Trp Phe Gly Gly Arg Glu His Val Leu Met Phe Ala Lys Leu Ala Leu Tyr Pro Cys Ala Ser Leu Leu Ala Phe Ala Ser 315 310 Thr Cys Leu Leu Ser Arg Phe Ser Val Gly Ile Phe His Leu Met Gln 330 Ile Ala Val Pro Cys Ala Phe Leu Leu Leu Arg Leu Leu Val Gly Leu 345 Ala Leu Ala Thr Leu Arg Val Leu Arg Gly Leu Ala Arg Pro Glu His 360 355

Pro Pro Pro Ala Pro Thr Gly Gln Asp Asp Pro Gln Ser Gln Leu Leu 370 . 375 380

Pro Ala Pro Cys 385

<210> 1468

<211> 388

<212> PRT

<213> Homo sapiens

<400> 1468

Met Met Thr Ile Thr Phe Leu Pro Tyr Thr Phe Ser Leu Met Val Thr 1 5 10 15

Phe Pro Asp Val Pro Leu Gly Ile Phe Leu Phe Cys Val Cys Val Ile 20 25 30

Ala Ile Gly Val Val Gln Ala Leu Ile Val Gly Tyr Ala Phe His Phe 35 40 45

Pro His Leu Leu Ser Pro Gln Ile Gln Arg Ser Ala His Arg Ala Leu 50 55 60

Tyr Arg Arg His Val Leu Gly Ile Val Leu Gln Gly Pro Ala Leu Cys
65 70 75 80

Phe Ala Ala Ile Phe Ser Leu Phe Phe Val Pro Leu Ser Tyr Leu 85 90 95

Leu Met Val Thr Val Ile Leu Leu Pro Tyr Val Ser Lys Val Thr Gly
100 105 110

Trp Cys Arg Asp Arg Leu Leu Gly His Arg Glu Pro Ser Ala His Pro 115 120 125

Val Glu Val Phe Ser Phe Asp Leu His Glu Pro Leu Ser Lys Glu Arg 130 135 140

Val Glu Ala Phe Ser Asp Gly Val Tyr Ala Ile Val Ala Thr Leu Leu 145 150 155 160

Ile Leu Asp Ile Cys Glu Asp Asn Val Pro Asp Pro Lys Asp Val Lys 165 170 175

Glu Arg Phe Ser Gly Ser Leu Val Ala Ala Leu Ser Ala Thr Gly Pro 180 185 190

Arg Phe Leu Ala Tyr Phe Gly Ser Phe Ala Thr Val Gly Leu Leu Trp 195 200 205

Phe Ala His His Ser Leu Phe Leu His Val Arg Lys Ala Thr Arg Ala 210 215 220

Met Gly Leu Leu Asn Thr Leu Ser Leu Ala Phe Val Gly Gly Leu Pro 225 230 235 240

Leu Ala Tyr Gln Gln Thr Ser Ala Phe Ala Arg Gln Pro Arg Asp Glu

245 250 255

Leu Glu Arg Val Arg Val Ser Cys Thr Ile Ile Phe Leu Ala Ser Ile 250 265 270

Phe Gln Leu Ala Met Trp Thr Thr Ala Leu Leu His Gln Ala Glu Thr 275 280 285

Leu Gln Pro Ser Val Trp Phe Gly Gly Arg Glu His Val Leu Met Phe 290 295 300

Ala Lys Leu Ala Leu Tyr Pro Cys Ala Ser Leu Leu Ala Phe Ala Ser 305 310 315 320

Thr Cys Leu Leu Ser Arg Phe Ser Val Gly Ile Phe His Leu Met Gln 325 330 335

Ile Ala Val Pro Cys Ala Phe Leu Leu Leu Arg Leu Leu Val Gly Leu 340 . 345 . 350

Ala Leu Ala Thr Leu Arg Val Leu Arg Gly Leu Ala Arg Pro Glu His 355 360 365

Pro Pro Pro Ala Pro Thr Gly Gln Asp Asp Pro Gln Ser Gln Leu Leu 370 380

Pro Ala Pro Cys 385

<210> 1469

<211> 262

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (231)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1469

Met Ser Pro Pro Pro Leu Leu Gln Pro Leu Leu Leu Leu Leu Pro Leu 1 5 10

Leu Asn Val Glu Pro Ser Gly Ala Thr Leu Ile Arg Ile Pro Leu His
20 25 30

Arg Val Gln Pro Gly Arg Arg Ile Leu Asn Leu Leu Arg Gly Trp Arg

Glu Pro Ala Glu Leu Pro Lys Leu Gly Ala Pro Ser Pro Gly Asp Lys 50 55 60

Pro Ile Phe Val Pro Leu Ser Asn Tyr Arg Asp Val Gln Tyr Phe Gly 65 70 75 80

Glu 11e Gly Leu Gly Thr Pro Pro Gln Asn Phe Thr Val Ala Phe Asp 85 90 95

. Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Arg Arg Cys His Phe Phe  $100\,$ 

Ser Val Pro Cys Trp Leu His His Arg Phe Asp Pro Lys Ala Ser Ser 115 120 125 .

Ser Phe Gln Ala Asn Gly Thr Lys Phe Ala Ile Gln Tyr Gly Thr Gly 130 135 140

Arg Val Asp Gly Ile Leu Ser Glu Asp Lys Leu Thr Ile Gly Gly Ile 145 150 155 160

Lys Gly Ala Ser Val Ile Phe Gly Glu Ala Leu Trp Glu Pro Ser Leu 165 170 175

Val Phe Ala Phe Ala His Phe Asp Gly Ile Leu Gly Leu Gly Phe Pro 180 185 190

Ile Leu Ser Val Glu Gly Val Arg Pro Pro Met Asp Val Leu Val Glu
195 200 205

Gln Gly Leu Leu Asp Lys Pro Val Phe Ser Phe Tyr Leu Asn Arg Asp 210 215 220

Pro Glu Glu Pro Asp Gly Xaa Glu Leu Val Leu Gly Gly Ser Asp Pro 225 230 235 240

Ala His Tyr Ile Pro Pro Ser Pro Phe Val Pro Val Arg Ser Pro Pro 245 250 255

Met Ala Asp Pro Gln Gly

<210> 1470

<211> 145

<212> PRT

<213> Homo sapiens

<400> 1470

Met Ser Pro Pro Pro Leu Leu Gln Pro Leu Leu Leu Leu Leu Pro Leu 1 5 15

Leu Asn Val Glu Pro Ser Gly Ala Thr Leu Ile Arg Ile Pro Leu His 20 25 30

Arg Val Gln Pro Gly Arg Arg Ile Leu Asn Leu Leu Arg Gly Trp Arg 45

Glu Pro Ala Glu Leu Pro Lys Leu Gly Ala Pro Ser Pro Gly Asp Lys
50 55 60

Pro Ile Phe Val Pro Leu Ser Asn Tyr Arg Asp Val Gln Tyr Phe Gly 65 70 75 80

Glu Ile Gly Leu Gly Thr Pro Pro Gln Asn Phe Thr Val Ala Phe Asp 85 90 95

Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Arg Arg Cys His Phe Phe

100 105 110

Ser Val Pro Cys Trp Leu His His Arg Phe Asp Pro Lys Ala Ser Ser 115 120 125

Ser Phe Arg Pro Met Gly Pro Ser Leu Pro Phe Asn Met Glu Leu Gly 130 140

Gly 145

<210> 1471

<211> 212

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1471

Gly Ser Ala Gly Thr Ala Arg Ile Xaa Gly Ser Thr Thr Arg Pro Asp 1 5 10 15

Pro Glu Glu Pro Asp Gly Gly Glu Leu Val Leu Gly Gly Ser Asp Pro  $20 \\ 25 \\ 30$ 

Ala His Tyr Ile Pro Pro Leu Thr Phe Val Pro Val Thr Val Pro Ala 35 40 45

Tyr Trp Gln Ile His Met Glu Arg Val Lys Val Gly Pro Gly Leu Thr 50 60

Leu Cys Ala Lys Gly Cys Ala Ala Ile Leu Asp Thr Gly Thr Ser Leu 65 70 75 80

Ile Thr Gly Pro Thr Glu Glu Ile Arg Ala Leu His Ala Ala Ile Gly 85 90 95

Gly Ile Pro Leu Leu Ala Gly Glu Tyr Ile Ile Leu Cys Ser Glu Ile 100 105 110

Pro Lys Leu Pro Ala Val Ser Phe Leu Leu Gly Gly Val Trp Phe Asn 115 120 125

Leu Thr Ala His Asp Tyr Val Ile Gln Thr Thr Arg Asn Gly Val Arg 130 135 140

Leu Cys Leu Ser Gly Phe Gln Ala Leu Asp Val Pro Pro Pro Ala Gly 145 150 155 160

Pro Phe Trp Ile Leu Gly Asp Val Phe Leu Gly Thr Tyr Val Ala Val

Phe Asp Arg Gly Asp Met Lys Ser Ser Ala Arg Val Gly Leu Ala Arg 180 185 190

Ala Arg Thr Arg Gly Ala Asp Leu Gly Trp Gly Glu Thr Ala Gln Ala 195 200 205

Gln Phe Pro Gly 210

<210> 1472

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1472

Met Val Met Ile Leu Phe Val Ala Phe Ile Thr Cys Trp Glu Glu Val 1 5 10 15

Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu Thr 20 25 30

Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg Ser 35 40 45

Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr Trp 50 60

Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val Gln 65 70 75 80

Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val Asn  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu Asn 100 105 110

Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys Cys 115 120 125

Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro 130 135 140

Ile Ser Ile Met Ile Cys 145 150

<210> 1473

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1473

Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu Thr 20 25 30

Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg Ser 35 40 45

Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr Trp 50 55 60

Leu Pro Phe Val Leu Leu Glr Val Ile Ile Val Leu Leu Lys Val Gln 65 70 75 80

Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val Asn 85 90 95

Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu Asn 100 105 110

Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys Cys 115 120 125

Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro 130 135 140

<210> 1474

<211> 353

<212> PRT

<213> Homo sapiens

<400> 1474

Met Arg Tyr Leu Leu Pro Ser Val Val Leu Leu Gly Thr Ala Pro Thr 1 5 10 15

Tyr Val Leu Ala Trp Gly Val Trp Arg Leu Leu Ser Ala Phe Leu Pro 20 25 30

Ala Arg Phe Tyr Gln Ala Leu Asp Asp Arg Leu Tyr Cys Val Tyr Gln 35 40 45

Ser Met Val Leu Phe Phe Phe Glu Asn Tyr Thr Gly Val Gln Ile Leu 50 60

Leu Tyr Gly Asp Leu Pro Lys Asn Lys Glu Asn Ile Ile Tyr Leu Ala 65 70 75 80

Asn His Gln Ser Thr Val Asp Trp Ile Val Ala Asp Ile Leu Ala Ile 85 90 95

Arg Gln Asn Ala Leu Gly His Val Arg Tyr Val Leu Lys Glu Gly Leu
100 105 110

Lys Trp Leu Pro Leu Tyr Gly Cys Tyr Phe Ala Gln His Gly Gly Ile 115 120 125

Tyr Val Lys Arg Ser Ala Lys Phe Asn Glu Lys Glu Met Arg Asn Lys

Leu Gln Ser Tyr Val Asp Ala Gly Thr Pro Met Tyr Leu Val Ile Phe 145 150 155 160

Pro Glu Gly Thr Arg Tyr Asn Pro Glu Gln Thr Lys Val Leu Ser Ala 165 170 175

Ser Gln Ala Phe Ala Ala Gln Arg Gly Leu Ala Val Leu Lys His Val 180 185 190

Leu Thr Pro Arg Ile Lys Ala Thr His Val Ala Phe Asp Cys Met Lys 195 200 205

Asn Tyr Leu Asp Ala Ile Tyr Asp Val Thr Val Val Tyr Glu Gly Lys 210 215 220

Asp Asp Gly Gly Gln Arg Arg Glu Ser Pro Thr Met Thr Glu Phe Leu 225 230 235 240

Cys Lys Glu Cys Pro Lys Ile His Ile His Ile Asp Arg Ile Asp Lys 245 250 255

Lys Asp Val Pro Glu Glu Gln Glu His Met Arg Arg Trp Leu His Glu 260 265 270

Arg Phe Glu Ile Lys Asp Lys Met Leu Ile Glu Phe Tyr Glu Ser Pro 275 280 285

Asp Pro Glu Arg Arg Lys Arg Phe Pro Gly Lys Ser Val Asn Ser Lys 290 295 300

Leu Ser Ile Lys Lys Thr Leu Pro Ser Met Leu Ile Leu Ser Gly Leu 305 310 315 320

Thr Ala Gly Met Leu Met Thr Asp Ala Gly Arg Lys Leu Tyr Val Asn 325 330 335

Thr Trp Ile Tyr Gly Thr Leu Leu Gly Cys Leu Trp Val Thr Ile Lys 340 345 350

Ala

<210> 1475

<211> 353

<212> PRT

<213> Homo sapiens

<400> 1475

Met Arg Tyr Leu Leu Pro Ser Val Val Leu Leu Gly Thr Ala Pro Thr 1 5 10 15

Tyr Val Leu Ala Trp Gly Val Trp Arg Leu Leu Ser Ala Phe Leu Pro 20 25 30

Ala Arg Phe Tyr Gln Ala Leu Asp Asp Arg Leu Tyr Cys Val Tyr Gln 35 40 45

Ser Met Val Leu Phe Phe Phe Glu Asn Tyr Thr Gly Val Gln Ile Leu 50 55 60

Leu Tyr Gly Asp Leu Pro Lys Asn Lys Glu Asn Ile Ile Tyr Leu Ala

| 65         |            |            |            |            | 70         |            |            |            |            | 75         |            |            |            |            | 80         |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asn        | His        | Gln        | Ser        | Thr<br>85  | Val        | Asp        | Trp        | Ile        | Val<br>90  | Ala        | Asp        | Ile        | Leu        | Ala<br>95  | Ile        |
| Arg        | Gln        | Asn        | Ala<br>100 | Leu        | Gly        | His        | Val        | Arg<br>105 | Tyr        | Val        | Leu        | Lys        | Glu<br>110 | Gly        | Leu        |
| Lys        | Trp        | Leu<br>115 | Pro        | Leu        | Tyr        | Gly        | Cys<br>120 | Tyr        | Phe        | Ala        | Gln        | His<br>125 | Gly        | Gly        | Ile        |
| Tyr        | Val<br>130 | Lys        | Arg        | Ser        | Ala        | Lys<br>135 | Phe        | Asn        | Glu        | Lys        | Glu<br>140 | Met        | Arg        | Asn        | Lys        |
| Leu<br>145 | Gln        | Ser        | Tyr        | Val        | Asp<br>150 | Ala        | Gly        | Thr        | Pro        | Met<br>155 | Tyr        | Leu        | Val        | Ile        | Phe<br>160 |
| Pro        | Glu        | Gly        | Thr        | Arg<br>165 | Tyr        | Asn        | Pro        | Glu        | Gln<br>170 | Thr        | Lys        | Val        | Leu        | Ser<br>175 | Ala        |
| Ser        | Gln        | Ala        | Phe<br>180 | Ala        | Ala        | Gln        | Arg        | Gly<br>185 | Leu        | Ala        | Val        | Leu        | Lys<br>190 | His        | Val        |
| Leu        | Thr        | Pro<br>195 | Arg        | Ile        | Lys        | Ala        | Thr<br>200 | His        | Val        | Ala        | Phe        | Asp<br>205 | Суѕ        | Met        | Lys        |
| Asn        | Tyr<br>210 | Leu        | Asp        | Ala        | Ile        | Tyr<br>215 | Asp        | Val        | Thr        | Val        | Val<br>220 | Tyr        | Glu        | Gly        | Lys        |
| Asp<br>225 | Asp        | Gly        | Gly        | Gln        | Arg<br>230 | Arg        | Glu        | Ser        | Pro        | Thr<br>235 | Met        | Thr        | Glu        | Phe        | Leu<br>240 |
| Суз        | Lys        | Glu        | Cys<br>-   | Pro<br>245 | Lys        | Ile        | His        | Ile        | His<br>250 | Ile        | Asp        | Arg        | Ile        | Asp<br>255 | Lys        |
| Lys        | Asp        | Val        | Pro<br>260 | Glu        | Glu        | Gln        | Glu        | His<br>265 | Met        | Arg        | Arg        | Trp        | Leu<br>270 | His        | Glu        |
| Arg        | Phe        | Glu<br>275 | Ile        | Lys        | Asp        | Lys        | Met<br>280 | Leu        | Ile        | Glu        | Phe        | Tyr<br>285 | Glu        | Ser        | Pro        |
| Asp        | Pro<br>290 | Glu        | Arg        | Arg        | Lys        | Arg<br>295 | Phe        | Pro        | Gly        | Lys        | Ser<br>300 | Val        | Asn        | Ser        | Lys        |
| Leu<br>305 |            | Ile        | Lys        | Lys        | Thr<br>310 | Leu        | Pro        | Ser        | Met        | Leu<br>315 | Ile        | Leu        | Ser        | Gly        | Leu<br>320 |
| Thr        | Ala        | Gly        | Met        | Leu<br>325 | Met        | Thr        | Asp        | Ala        | Gly<br>330 |            | Lys        | Leu        | Tyr        | Val<br>335 | Asn        |
| Thr        | Trp        | Ile        | Tyr        | Gly        | Thr        | Leu        | Leu        | Gly        | Cys        | Leu        | Trp        | Val        | Thr        | Ile        | Lys        |

Ala

<210> 1476 <211> 80

340 345 350

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1476

Met Thr His Cys Leu Leu His Gly Met Gly Xaa Ala Gly Ala Ala Ser  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Thr Pro Lys Pro Met Ser Leu Ile Ser Ala Tyr Cys Gly Gly Leu 20 25 30

Trp Leu Ala Ala Val Ala Val Met Val Gl<br/>n Met Ala Ala Leu Cys Glý\$35\$ 40 45

Ala Gln Asp Ile Gln Asp Lys Phe Ser Ser Ile Leu Ser Arg Gly Gln 50 55 60

Glu Ala Tyr Glu Arg Leu Leu Trp Asn Gly Glu Phe Gly Glu Pro Lys
65 70 75 80

<210> 1477

<211> 415

<212> PRT

<213> Homo sapiens

<400> 1477

Val Gly Leu Val Ser Met Leu Gly Ile Pro Ile Pro Gly Ala Glu Gly
1 5 10 15

Ala Pro Val Leu Asn Ser Leu Val Phe Leu Ser Gly Gln Ser Thr Pro 20 25 30

Thr Gln Lys Gly Val Gly Ile Ala Gly Ala Val Cys Val Ser Ser Lys
35 40 45

Leu Arg Pro Arg Gly Gln Cys Arg Leu Glu Phe Ser Leu Ala Trp Asp 50 55 60

Met Pro Arg Ile Met Phe Gly Ala Lys Gly Gln Val His Tyr Arg Arg 65 70 75 80

Tyr Thr Arg Phe Phe Gly Gln Asp Gly Asp Ala Ala Pro Ala Leu Ser 85 90 95

His Tyr Ala Leu Cys Arg Tyr Ala Glu Trp Glu Glu Arg Ile Ser Ala 100 105 110

Trp Gln Ser Pro Val Leu Asp Asp Arg Ser Leu Pro Ala Trp Tyr Lys 115 120 125

Ser Ala Leu Phe Asn Glu Leu Tyr Phe Leu Ala Asp Gly Gly Thr Val

130 135 140 Trp Leu Glu Val Leu Glu Asp Ser Leu Pro Glu Glu Leu Gly Arg Asn 150 155 Met Cys His Leu Arg Pro Thr Leu Arg Asp Tyr Gly Arg Phe Gly Tyr Leu Glu Gly Gln Glu Tyr Arg Met Tyr Asn Thr Tyr Asp Val His Phe Tyr Ala Ser Phe Ala Leu Ile Met Leu Trp Pro Lys Leu Glu Leu Ser 200 Leu Gln Tyr Asp Met Ala Leu Ala Thr Leu Arg Glu Asp Leu Thr Arg 215 Arg Arg Tyr Leu Met Ser Gly Val Met Ala Pro Val Lys Arg Arg Asn 230 235 Val Ile Pro His Asp Ile Gly Asp Pro Asp Asp Glu Pro Trp Leu Arg 250 Val Asn Ala Tyr Leu Ile His Asp Thr Ala Asp Trp Lys Asp Leu Asn 265 Leu Lys Phe Val Leu Gln Val Tyr Arg Asp Tyr Tyr Leu Thr Gly Asp Gln Asn Phe Leu Lys Asp Met Trp Pro Val Cys Leu Ala Val Met Glu 295 Ser Glu Met Lys Phe Asp Lys Asp His Asp Gly Leu Ile Glu Asn Gly 310 Gly Tyr Ala Asp Gln Thr Tyr Asp Gly Trp Val Thr Thr Gly Pro Ser Ala Tyr Cys Gly Gly Leu Trp Leu Ala Ala Val Ala Val Met Val Gln 340 Met Ala Ala Leu Cys Gly Ala Gln Asp Ile Gln Asp Lys Phe Ser Ser 360

Ile Leu Ser Arg Gly Gln Glu Ala Tyr Glu Arg Leu Leu Trp Asn Gly 370 375

Arg Tyr Tyr Asn Tyr Asp Ser Ser Ser Arg Pro Gln Ser Arg Ser Val 390 395

Met Ser Asp Gln Cys Ala Gly Gln Trp Phe Leu Lys Ala Cys Gly

<210> 1478

<211> 86

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1478

Met Ser Leu Gly Gly Ser Gln Ser Ser Leu Val Ser Trp Arg Ala Thr 1 5 10 15

Gln Ile Ala Cys Met Thr Leu Ser Trp Pro Leu Trp Thr Cys Trp Leu 20 25 30

Ala Ala Pro Leu Ser Leu Thr Lys Ser Pro Trp Arg Gln Trp Ser Thr 35 40 45

His Val Lys Gly Phe Asn Leu Ala Ser Ser Gln Ala Glu Val Gln Pro 50 60

Val Gly Gln Thr Leu Ala Ser Glu Lys Lys Xaa Leu Gln Glu Val Leu 65 70 75 80

Ala Arg Ala Ile Gln His

<210> 1479

<211> 159

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (153)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (158)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1479

Met His Arg Leu Ile Phe Val Tyr Thr Leu Ile Cys Ala Asn Phe Cys
1 5 10 15

Ser Cys Arg Asp Thr Ser Ala Thr Pro Gln Ser Ala Ser Ile Lys Ala 20 25 30

Leu Arg Asn Ala Asn Leu Arg Arg Asp Glu Ser Asn His Leu Thr Asp 35 40 45

Leu Tyr Arg Arg Asp Glu Thr Ile Gln Val Lys Gly Asn Gly Tyr Val
50 55 60

Gln Ser Pro Arg Phe Pro Asn Ser Tyr Pro Arg Asn Leu Leu Thr 65 70 75 80

Trp Arg Leu His Ser Gln Glu Asn Thr Arg Ile Gln Leu Val Val Asp  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Asn Gln Phe Gly Leu Glu Glu Ala Glu Asn Asp Ile Cys Arg Tyr Asp 100 105 110

Phe Val Glu Val Glu Asp Ile Ser Glu Thr Ser Thr Ile Ile Arg Gly 115 120 125

Arg Trp Cys Gly His Lys Glu Val Pro Pro Arg Ile Lys Ser Arg Thr 130 135 140

<210> 1480

<211> 89

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1480

Leu Ile Ile Lys Lys Gly Lys Ile Trp Phe Pro Glu Lys Arg Pro Ile 1 5 10

Pro Lys His Phe Phe His Glu Lys His Cys Ile Leu Thr Tyr Val Asp 20 25 30

Xaa Asn Asn Leu Ser Pro Lys Pro Cys His Asn Asn Ile Ser Ala Leu 35 40 45

Glu Ile Lys Ser Leu Cys Phe Leu Cys Ile Leu Leu Arg His Xaa Tyr 50 55 60

Ser Phe Asn Thr Tyr Leu Lys Asn Leu Leu Arg Arg Phe Phe Ile Ile 65 70 75 80

Val Leu Gln Lys Thr Met Tyr Lys Leu 85

<210> 1481

<211> 370

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (215)

<223> Maa equals any of the naturally occurring L-amino acids

<400> 1481

Met His Arg Leu Ile Phe Val Tyr Thr Leu Ile Cys Ala Asn Phe Cys 1 5 10 15

Ser Cys Arg Asp Thr Ser Ala Thr Pro Gln Ser Ala Ser Ile Lys Ala 20 25 30

Leu Arg Asn Ala Asn Leu Arg Arg Asp Glu Ser Asn His Leu Thr Asp 35 40 45

Leu Tyr Arg Arg Asp Glu Thr Ile Gln Val Lys Gly Asn Gly Tyr Val
50 55 60

Gln Ser Pro Arg Phe Pro Asn Ser Tyr Pro Arg Asn Leu Leu Leu Thr
65 70 75 80

Trp Arg Leu His Ser Gln Glu Asn Thr Arg Ile Gln Leu Val Phe Asp 85 90 95

Asn Gln Phe Gly Leu Glu Glu Ala Glu Asn Asp Ile Cys Arg Tyr Asp 100 105 110

Phe Val Glu Val Glu Asp Ile Ser Glu Thr Ser Thr Ile Ile Arg Gly 115 120 125

Arg Trp Cys Gly His Lys Glu Val Pro Pro Arg Ile Lys Ser Arg Thr 130 135 140

Asn Gln Ile Lys Ile Thr Phe Lys Ser Asp Asp Tyr Phe Val Ala Lys 145 150 155 160

Pro Gly Phe Lys Ile Tyr Tyr Ser Leu Leu Glu Asp Phe Gln Pro Ala 165 170 175

Ala Ala Ser Glu Thr Asn Trp Glu Ser Val Thr Ser Ser Ile Ser Gly
180 185 190

Val Ser Tyr Asn Ser Pro Ser Val Thr Asp Pro Thr Leu Ile Ala Asp 195 200 205

Ala Leu Asp Lys Lys Ile Ala Xaa Phe Asp Thr Val Glu Asp Leu Leu 210 215 220

Lys Tyr Phe Asn Pro Glu Ser Trp Gln Glu Asp Leu Glu Asn Met Tyr 225 230 235 240

Leu Asp Thr Pro Arg Tyr Arg Gly Arg Ser Tyr His Asp Arg Lys Ser 245 250 255

Lys Val Asp Leu Asp Arg Leu Asn Asp Asp Ala Lys Arg Tyr Ser Cys 260 265 270

Thr Pro Arg Asn Tyr Ser Val Asn Ile Arg Glu Glu Leu Lys Leu Ala 275 280 285

Asn Val Val Phe Phe Pro Arg Cys Leu Leu Val Gln Arg Cys Gly Gly 290 295 300

Asn Cys Gly Cys Gly Thr Val Asn Trp Arg Ser Cys Thr Cys Asn Ser 305 310 315 320

Gly Lys Thr Val Lys Lys Tyr His Glu Val Leu Gln Phe Glu Pro Gly 325 330 335

His Ile Lys Arg Arg Gly Arg Ala Lys Thr Met Ala Leu Val Asp Ile 340 345 350

Gln Leu Asp His His Glu Arg Cys Asp Cys Ile Cys Ser Ser Arg Pro 355 360 365

Pro Arg

<210> 1482

<211> 370

<212> PRT

<213> Homo sapiens

<400> 1482

Met His Arg Leu Ile Phe Val Tyr Thr Leu Ile Cys Ala Asn Phe Cys 1  $\phantom{-}$  5  $\phantom{-}$  10  $\phantom{-}$  15

Ser Cys Arg Asp Thr Ser Ala Thr Pro Gln Ser Ala Ser Ile Lys Ala 20 25 30

Leu Arg Asn Ala Asn Leu Arg Arg Asp Glu Ser Asn His Leu Thr Asp \$35\$

Leu Tyr Arg Arg Asp Glu Thr Ile Gln Val Lys Gly Asn Gly Tyr Val
50 60

Gln Ser Pro Arg Phe Pro Asn Ser Tyr Pro Arg Asn Leu Leu Leu Thr
65 70 75 80

Trp Arg Leu His Ser Gln Glu Asn Thr Arg Ile Gln Leu Val Phe Asp 85 90 95

Asn Gln Phe Gly Leu Glu Glu Ala Glu Asn Asp Ile Cys Arg Tyr Asp 100 105 110

Phe Val Glu Val Glu Asp Ile Ser Glu Thr Ser Thr Ile Ile Arg Gly 115 120 125

Arg Trp Cys Gly His Lys Glu Val Pro Pro Arg Ile Lys Ser Arg Thr 130 135 140

Asn Gln Ile Lys Ile Thr Phe Lys Ser Asp Asp Tyr Phe Val Ala Lys
145 150 155 160

Pro Gly Phe Lys Ile Tyr Tyr Ser Leu Leu Glu Asp Phe Gln Pro Ala 165 170 175

Ala Ala Ser Glu Thr Asn Trp Glu Ser Val Thr Ser Ser Ile Ser Gly
180 185 190

Val Ser Tyr Asn Ser Pro Ser Val Thr Asp Pro Thr Leu Ile Ala Asp 195 200 205

Ala Leu Asp Lys Lys Ile Ala Glu Phe Asp Thr Val Glu Asp Leu Leu 210 215 220

Lys Tyr Phe Asn Pro Glu Ser Trp Gln Glu Asp Leu Glu Asn Met Tyr 225 230 235 240

Leu Asp Thr Pro Arg Tyr Arg Gly Arg Ser Tyr His Asp Arg Lys Ser 245 250 255

Lys Val Asp Leu Asp Arg Leu Asn Asp Asp Ala Lys Arg Tyr Ser Cys 260 265 270

Thr Pro Arg Asn Tyr Ser Val Asn Ile Arg Glu Glu Leu Lys Leu Ala 275 280 285

Asn Val Val Phe Phe Pro Arg Cys Leu Leu Val Gln Arg Cys Gly Gly 290 295 300

Asn Cys Gly Cys Gly Thr Val Asn Trp Arg Ser Cys Thr Cys Asn Ser 305 310 315 320

Gly Lys Thr Val Lys Lys Tyr His Glu Val Leu Gln Phe Glu Pro Gly 325 330 335

His Ile Lys Arg Arg Gly Arg Ala Lys Thr Met Ala Leu Val Asp Ile 340 345 350

Gln Leu Asp His His Glu Arg Cys Asp Cys Ile Cys Ser Ser Arg Pro 355 360 365

Pro Arg 370

<210> 1483

<211> 229

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (206)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1483

Met Tyr Lys Leu Leu Phe Asp Leu Leu Thr Val Leu Ala Val Ala 1 5 10 15

Leu Leu Ile Gln Phe Pro Arg Lys Leu Leu Cys Gly Leu Cys Pro Gly 20 25 30

Ala Leu Gly Arg Leu Ala Gly Thr Gln Glu Phe Gln Val Pro Asp Glu 35 40 45

Val Leu Gly Leu Ile Tyr Ala Gln Thr Val Val Trp Val Gly Ser Phe 50 55 60

Phe Cys Pro Leu Leu Pro Leu Leu Asn Thr Val Lys Phe Leu Leu Leu 65 70 75 80

Phe Tyr Leu Lys Lys Leu Thr Leu Phe Ser Thr Cys Ser Pro Ala Ala 85 90 95

Arg Thr Phe Arg Ala Ser Ala Ala Asn Phe Phe Phe Pro Leu Val Leu 100 105 110

Leu Leu Gly Leu Ala Ile Ser Ser Val Pro Leu Leu Tyr Ser Ile Phe 115 120 125

Leu Ile Pro Pro Ser Lys Leu Cys Gly Pro Phe Arg Gly Gln Ser Ser 130 135 140

Ile Trp Ala Gln Ile Pro Glu Ser Ile Ser Ser Leu Pro Glu Thr Thr 145 150 155 160

Gln Asn Phe Leu Phe Phe Leu Gly Thr Gln Ala Phe Ala Val Pro Leu 165 170 175

Leu Leu Ile Ser Ser Ile Leu Met Ala Tyr Thr Val Ala Leu Ala Asn 180 185 190

Ser Tyr Gly Arg Leu Ile Ser Glu Leu Lys Arg Gln Arg Xaa Thr Glu 195 200 205

Ala Gln Asn Lys Val Phe Leu Ala Arg Arg Ala Val Ala Leu Thr Ser 210 215 220

Thr Lys Pro Ala Leu. 225

<210> 1484

<211> 85

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (62)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1484

Phe Leu Gly Thr Gln Ala Phe Ala Val Pro Leu Leu Leu Ile Ser Arg

1 5 10 15

Ser Gln Thr Phe Gly Tyr Asn Gly Arg Ala Cys Gln Glu Trp Leu Pro 20 25 30

Xaa Leu Ile Ser Ser Ile Leu Met Ala Tyr Thr Val Ala Leu Ala Asn

Ser Tyr Gly Arg Leu Ile Ser Glu Leu Lys Arg Gln Arg Xaa Thr Glu 50 55 60

Ala Gln Asn Lys Val Phe Leu Ala Arg Arg Ala Val Ala Leu Thr Ser 65 70 75 80

Thr Lys Pro Ala Leu 85

<210> 1485

<211> 229

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (206)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1485

Met Tyr Lys Leu Leu Phe Asp Leu Leu Thr Val Leu Ala Val Ala 1 5 10 15

Leu Leu Ile Gln Phe Pro Arg Lys Leu Leu Cys Gly Leu Cys Pro Gly
20 25 30

Ala Leu Gly Arg Leu Ala Gly Thr Gln Glu Phe Gln Val Pro Asp Glu 35 40 45

Val Leu Gly Leu Ile Tyr Ala Gln Thr Val Val Trp Val Gly Ser Phe 50 55 60

Phe Cys Pro Leu Leu Pro Leu Leu Asn Thr Val Lys Phe Leu Leu Leu 65 70 75 80

Phe Tyr Leu Lys Lys Leu Thr Leu Phe Ser Thr Cys Ser Pro Ala Ala 85 90 95

Arg Thr Phe Arg Ala Ser Ala Ala Asn Phe Phe Phe Pro Leu Val Leu 100 105 110

Leu Leu Gly Leu Ala Ile Ser Ser Val Pro Leu Leu Tyr Ser Ile Phe 115 120 125

Leu Ile Pro Pro Ser Lys Leu Cys Gly Pro Phe Arg Gly Gln Ser Ser 130 135 140

Ile Trp Ala Gln Ile Pro Glu Ser Ile Ser Ser Leu Pro Glu Thr Thr 145 150 155 160

Gln Asn Phe Leu Phe Phe Leu Gly Thr Gln Ala Phe Ala Val Pro Leu 165 170 175

Leu Leu Ile Ser Ser Ile Leu Met Ala Tyr Thr Val Ala Leu Ala Asn 180 185 190

Ser Tyr Gly Arg Leu Ile Ser Glu Leu Lys Arg Gln Arg Xaa Thr Glu 195 200 205

Ala Gln Asn Lys Val Phe Leu Ala Arg Arg Ala Val Ala Leu Thr Ser

210 215 220

Thr Lys Pro Ala Leu 225

<210> 1486

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1486

Met Ala Thr Phe Ser Leu Cys Tyr Leu Met Ala Phe Pro Leu Cys Ala 1 5 10 15

Gly Ile Ala Gly Ile Ser Val Cys Val Lys Ile Ser Cys Phe Tyr Lys 20 25 30

Asp Ile Ser Gln Thr Gly Leu Arg Pro Thr Leu Lys Ala Tyr Leu Asn 35 40 45

Phe Asn Leu Leu Phe Ser Gly Pro Ile Ser Lys Tyr Ser Leu Ile Leu 50 55 60

Arg Tyr Trp Tyr Leu Gly Leu Gln His Thr Asn Phe Gly Val Asp Thr 65 70 75 80

Ile Gln Pro Ile Thr Asn Cys Ala His Glu Met Ile Tyr
85 90

<210> 1487

<211> 124

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<321> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1487

Ala Leu Pro Phe Thr Leu Asn Lys Thr Ser Asn Tyr Pro Gln Asp Leu 1 5 10 15

Val Leu Xaa Ser Leu Leu Gly Xaa Asn Tyr Xaa Gln Leu Gln Ile 20 25 30

Leu Leu Glu Cys Ile Phe Pro Val Pro His Ser Leu Leu Tyr Val Val 35 40 45

Leu Pro Asn Ser Ile Asp Leu Xaa Gln Lys Leu Pro Arg Asp Leu Pro 50 55 60

His Leu Pro Cys Pro Xaa Phe Leu Trp Pro Arg Pro Gly Ser Pro Pro 65 70 75 80

Lys Cys Phe Leu Ser Leu Ser Leu Thr Ala Leu Pro Leu Ser Ser Cys 85 90 95

Arg Tyr Thr Leu Pro Pro Ser Pro His Pro Leu Met Pro Ser Pro Leu 100 105 110

Leu Pro Ser Trp Val Gln Pro Ser Cys Tyr Leu Ala 115

<210> 1488

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1488

Met Ala Thr Phe Ser Leu Cys Tyr Leu Met Ala Phe Pro Leu Cys Ala
1 5 10 15

Gly Ile Ala Gly Ile Ser Val Cys Val Lys Ile Ser Cys Phe Tyr Lys 20 25 30

Asp Ile Ser Gln Thr Gly Leu Arg Pro Thr Leu Lys Ala Tyr Leu Asn  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Phe Asn Leu Leu Phe Ser Gly Pro Ile Gln Ile 50 55

<210> 1489

<211> 314

<212> PRT

<213> Homo sapiens

<400> 1489

Gly Ser Gly Arg Gln Ala Gly Trp Pro Arg Gly Leu Leu Ser Gly Pro 1 5 10 15

Ala Pro Ser Glu Arg Ser Ala Val Ala Arg Leu Ala Pro Thr Glu Ser

25 30

Leu Ala Arg Met Glu Ala Val Val Asn Leu Tyr Gln Glu Val Met Lys 35 40 45

20

His Ala Asp Pro Arg Ile Gln Gly Tyr Pro Leu Met Gly Ser Pro Leu 50 55 60

Leu Met Thr Ser Ile Leu Leu Thr Tyr Val Tyr Phe Val Leu Ser Leu 65 70 75 80

Gly Pro Arg Ile Met Ala Asn Arg Lys Pro Phe Gln Leu Arg Gly Phe 85 90 95

Met Ile Val Tyr Asn Phe Ser Leu Val Ala Leu Ser Leu Tyr Ile Val 100 105 110

Tyr Glu Phe Leu Met Ser Gly Trp Leu Ser Thr Tyr Thr Trp Arg Cys 115 120 125

Asp Pro Val Asp Tyr Ser Asn Ser Pro Glu Ala Leu Arg Met Val Arg 130 135 140

Val Ala Trp Leu Phe Leu Phe Ser Lys Phe Ile Glu Leu Met Asp Thr 145 150 155 160

Val Ile Phe Ile Leu Arg Lys Lys Asp Gly Gln Val Thr Phe Leu His 165 170 175

Val Phe His His Ser Val Leu Pro Trp Ser Trp Trp Gly Val Lys 180 185 190

Ile Ala Pro Gly Gly Met Gly Ser Phe His Ala Met Ile Asn Ser Ser 195 200 205

Val His Val Ile Met Tyr Leu Tyr Tyr Gly Leu Ser Ala Phe Gly Pro 210 215 220

Val Ala Gln Pro Tyr Leu Trp Trp Lys Lys His Met Thr Ala Ile Gln 225 230 235 240

Leu Ile Gln Phe Val Leu Val Ser Leu His Ile Ser Gln Tyr Tyr Phe 245 250 255

Met Ser Ser Cys Asn Tyr Gln Tyr Pro Val Ile Ile His Leu Ile Trp 260 265 270

Met Tyr Gly Thr Ile Phe Phe Met Leu Phe Ser Asn Phe Trp Tyr His 275 280 285

Ser Tyr Thr Lys Gly Lys Arg Leu Pro Arg Ala Leu Gln Gln Asn Gly 290 295 300

Ala Pro Gly Ile Ala Lys Val Lys Ala Asn 305

<210> 1490 <211> 258

<212> PRT

<213> Homo sapiens

<400> 1490

Met Lys His Ala Asp Pro Arg Ile Gln Gly Tyr Pro Leu Met Gly Ser 1 5 10 15

Pro Leu Leu Met Thr Ser Ile Leu Leu Thr Tyr Val Tyr Phe Val Leu 20 25 30

Ser Leu Gly Pro Arg Ile Met Ala Asn Arg Lys Pro Phe Gln Leu Arg 35 40 45

Gly Phe Met Ile Val Tyr Asn Phe Ser Leu Val Ala Leu Ser Leu Tyr 50 55 60

Ile Val Tyr Glu Phe Leu Met Ser Gly Trp Leu Ser Thr Tyr Thr Trp 65 70 75 80

Arg Cys Asp Pro Gln Asp Cys Thr Leu Gly Gln Cys Pro Ser Val Pro 85 90 95

Ser Pro Pro Thr Pro Val Thr Lys Ala Tyr Val Val Arg Thr Glu Gln 100 105 110

Gly Thr Gly Pro Pro Leu Pro Thr Ala Ala Leu Gln Gly Pro Arg Leu 115 120 125

Trp Phe Leu Thr His Phe Pro Arg Ala Ala Pro Gly Met Trp Pro His 130 135 140

Cys Cys Leu Pro Leu Gln Ser Trp Gly Leu Lys Gly Leu Tyr Ser Tyr 145 150 155 160

Phe Pro Leu Pro Ala Leu Lys Leu Gly Arg Gly Ala Leu Arg Ala Gly 165 170 175

Pro Thr Lys Gly Leu Val Ala Phe Phe Leu Thr Gln Lys Arg Ser Ala 180 185 190

Ile Met Ser Leu Trp Thr Gln Ser His Ser Ser Thr Pro His Thr Glu
195 200 205

Ala Val Ala Ser Gly Pro Lys Val Arg Val Gly Gly Leu Gly Ile 210 215 220

Gln Pro Val Glu Ala Ala Tyr Ser Thr Cys Val Leu Ile Lys Ser Asp 225 230 235 240

Arg Gly Asn Gln Lys Lys Lys Lys Lys Lys Leu Glu Asn Tyr Phe 245 250 255

Leu Lys

<210> 1491

<211> 222

<212> PRT

<213> Homo sapiens

<400> 1491

Met Lys His Ala Asp Pro Arg Ile Gln Gly Tyr Pro Leu Met Gly Ser 1 5 10 15

Pro Leu Leu Met Thr Ser Ile Leu Leu Thr Tyr Val Tyr Phe Val Leu 20 25 30

Ser Leu Gly Pro Arg Ile Met Ala Asn Arg Lys Pro Phe Gln Leu Arg 35 40 45

Gly Phe Met Ile Val Tyr Asn Phe Ser Leu Val Ala Leu Ser Leu Tyr 50 55 60

Ile Val Tyr Glu Val Ile Phe Ile Leu Arg Lys Lys Asp Gly Gln Val 65 70 75 80

Thr Phe Leu His Val Phe His His Ser Val Leu Pro Trp Ser Trp Trp 85 90 95

Trp Gly Val Lys Ile Ala Pro Gly Gly Met Gly Ser Phe His Ala Met 100 105 110

Ile Asn Ser Ser Val His Val Ile Met Tyr Leu Tyr Tyr Gly Leu Ser 115 120 125

Ala Phe Gly Pro Val Ala Gln Pro Tyr Leu Trp Trp Lys Lys His Met 130 135 140

Thr Ala Ile Gln Leu Ile Gln Phe Val Leu Val Ser Leu His Ile Ser 145 150 155 160

Gln Tyr Tyr Phe Met Ser Ser Cys Asn Tyr Gln Tyr Pro Val Ile Ile 165 170 175

His Leu Ile Trp Met Tyr Gly Thr Ile Phe Phe Met Leu Phe Ser Asn 180 185 190

Phe Trp Tyr His Ser Tyr Thr Lys Gly Lys Arg Leu Pro Arg Ala Leu 195 200 205

Gln Gln Asn Gly Ala Pro Gly Ile Ala Lys Val Lys Ala Asn 210 215 220

<210> 1492

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1492

Met Tyr Gly Leu Ser Ile Cys Tyr Leu Lys Cys Leu Gly Pro Glu Val 1 5 10 15

Phe Trp Thr Phe Phe Leu Phe Trp Asn Thr Ser Ile Cys Ile Leu Pro 20 25 30

Val Glu His Pro Lys Ser Glu Ile Ser Lys Ile Gln Asn Val Pro Val

35 40 45

Ser Leu Asn Ser Ser Val Asp Gly His Leu Ser Tyr Phe Arg Phe Glu 50 60

Ala Ile Met Arg Glu Ala Ala Val His Val Phe Val Tyr Val Lys Cys 65 70 75 80

Val Phe Thr Cys Gln Ile Leu Lys Asp Leu Thr Asp Phe 85 90

<210> 1493

<211> 65

<212> PRT

<213> Homo sapiens

<400> 1493

Lys Leu Ser Asn Cys Asn Cys Phe Gln Leu Leu Ser Glu Val Gly Ile 1 5 10 15

Met Val Asp Leu Ile Ser Ser Val Leu Phe Leu Gln Leu Tyr Tyr Gln 20 25 30

Val Leu Asn Phe Gly Met Ile Val Ser Ser Ala Leu Met Ile Trp Lys 35 40 45

Gly Leu Met Val Ile Thr Gly Ser Glu Ser Pro Ile Val Val Leu 50 55 60

Arg 65

<210> 1494

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1494

Met Tyr Gly Leu Ser Ile Cys Tyr Leu Lys Cys Leu Gly Pro Glu Val 1 5 10

Phe Trp Thr Phe Phe Leu Phe Trp Asn Thr Ser Ile Cys Ile Leu Pro 20 25 30

Val Glu His Pro Lys Ser Glu Ile Ser Lys Ile Gln Asn Val Pro Val 35 40 45

Ser Leu Asn Ser Ser Val Asp Gly His Leu Ser Tyr Phe Arg Phe Glu 50 60

Ala Ile Met Arg Glu Ala Ala Val His Val Phe Val Tyr Val Lys Cys 65 70 75 80

Val Phe Thr Cys Gln Ile Leu Lys Asp Leu Thr Asp Phe

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<210> 1495
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<211> 81

<212> PRT

<213> Homo sapiens

<400> 1495

Met Gly Lys Pro Ser Leu Leu Phe Phe Gly Leu Met Ala Ser Trp Arg 1 5 10 15

Thr Arg Ser Gln Ala Arg Arg Thr Trp Ser Thr Ser Ser Arg Met Pro 20 25 30

Gly Arg Asn Val Leu Leu Arg Ser Arg Lys Arg Arg Ser Gln Ile Ser 35 40 45

Ser Ser Ile Ser Trp Ser Ile Ala Leu Gly Pro Val Met Pro Trp Pro 50 60

Gly Leu Ile Leu Phe Leu Lys Ile Ser Arg Ser Ser Thr Pro Thr Arg 65 70 75 80

Leu

<210> 1496

<211> 81

<212> PRT

<213> Homo sapiens

<400> 1496

Met Gly Lys Pro Ser Leu Leu Phe Phe Gly Leu Met Ala Ser Trp Arg 1 5 10 15

Thr Arg Ser Gln Ala Arg Arg Thr Trp Ser Thr Ser Ser Arg Met Pro 20 25 30

Gly Arg Asn Val Leu Leu Arg Ser Arg Lys Arg Arg Ser Gln Ile Ser 35 40 45

Ser Ser Ile Ser Trp Ser Ile Ala Leu Gly Pro Val Met Pro Trp Pro 50 55 60

Gly Leu Ile Leu Phe Leu Lys Ile Ser Arg Ser Ser Thr Pro Thr Arg 65 70 75 80

Leu

<210> 1497

<211> 47

<212> PRT

<213> Homo sapiens

< 220 >

<221> SITE

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<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1497
Met.Arg Leu Arg Phe Trp Leu Leu Ile Trp Leu Leu Gly Phe Ile
Ser His Gln Pro Thr Pro Val Ile Asn Ser Leu Ala Val Tyr Arg His
Arg Glu Thr Asp Phe Gly Val Arg Val Arg Asp His Pro Trp Xaa
                             40
<210> 1498
<211> 394
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (200)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (225)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (237)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (389)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1498
Glu Val Ile Asn Thr Leu Ala Asp His Arg His Arg Gly Thr Asp Phe
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Gly Gly Ser Pro Trp Leu Leu Ile Ile Thr Val Phe Leu Arg Ser Tyr Lys Phe Ala Ile Ser Leu Cys Thr Ser Tyr Leu Cys Val Ser Phe Leu Lys Thr Ile Phe Pro Ser Gln Asn Gly His Asp Gly Ser Thr Asp Val Gln Gln Arg Ala Arg Arg Ser Asn Xaa Arg Arg Gln Glu Gly Ile Lys Ile Val Leu Glu Asp Ile Phe Thr Leu Trp Arg Gln Val Glu Thr Lys Val Arg Ala Lys Ile Arg Lys Met Lys Val Thr Thr Lys Val Asn Arg His Asp Lys Ile Asn Gly Lys Arg Lys Thr Ala Lys Glu His Leu Arg Lys Leu Ser Met Lys Glu Arg Glu His Gly Glu Lys Glu Arg Gln Val 135 Ser Glu Ala Glu Glu Asn Gly Lys Leu Asp Met Lys Glu Ile His Thr 155 145 Tyr Met Glu Met Phe Gln Arg Ala Gln Ala Leu Arg Arg Arg Ala Glu 165 Asp Tyr Tyr Arg Cys Lys Ile Thr Pro Ser Ala Arg Lys Pro Leu Cys 180 185 Asn Xaa Val Arg Met Ala Ala Xaa Glu His Arg His Ser Ser Gly Leu 200 Pro Xaa Trp Pro Tyr Leu Thr Ala Glu Thr Leu Lys Asn Arg Met Gly 215 Xaa Gln Pro Pro Pro Pro Thr Gln Gln His Ser Ile Xaa Asp Asn Ser 235 Leu Ser Leu Lys Thr Pro Pro Glu Cys Leu Leu His Pro Leu Pro Pro Ser Val Asp Asp Asn Ile Lys Glu Cys Pro Leu Ala Pro Leu Pro Pro Ser Val Asp Asp Asn Leu Lys Glu Cys Leu Leu Val Pro Leu Pro Pro Ser Pro Leu Pro Pro Ser Val Asp Asp Asn Leu Lys Asp Cys Leu Phe Val Pro Leu Pro Pro Ser Pro Leu Pro Pro Ser Val Asp Asp Asn Leu 310 315 Lys Thr Pro Pro Leu Ala Thr Gln Glu Ala Glu Ala Glu Lys Pro Pro 330 325

Lys Pro Lys Arg Trp Arg Val Asp Glu Val Glu Gln Ser Pro Lys Pro 340 345 350

Lys Arg Arg Arg Ala Asp Glu Val Glu Gln Ser Pro Lys Pro Lys Arg 355 360 365

Gln Arg Glu Ala Glu Ala Gln Gln Leu Pro Lys Pro Lys Arg Arg Arg 370 375 380

Leu Ser Lys Leu Xaa Thr Arg His Cys Thr 385 390

<210> 1499

<211> 212

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (122)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1499

Met Arg Leu Arg Phe Trp Leu Leu Ile Trp Leu Leu Gly Phe Ile 1 5 10 15

Ser His Gln Pro Thr Pro Val Ile Asn Ser Leu Ala Val Tyr Arg His 20 25 30

Arg Glu Thr Asp Phe Gly Val Gly Val Arg Asp His Pro Gly Gln His 35 40 45

Gly Lys Thr Pro Ser Xaa Gln Lys Leu Asp Asn Leu Ile Ile Ile 50 55 60

Ile Gly Phe Leu Arg Arg Tyr Thr Phe Xaa Ile Leu Phe Cys Thr Ser 65 70 75 80

Xaa Leu Cys Val Ser Phe Leu Lys Thr Ile Phe Trp Ser Arg Asn Gly 85 90 95

His Asp Gly Ser Xaa Asp Val Gln Gln Arg Ala Trp Arg Ser Asn Arg

Ser Arg Gln Lys Gly Leu Arg Ser Ile Xaa Met His Thr Lys Lys Arg 115 120 125

Val Ser Ser Phe Arg Gly Asn Lys Ile Gly Leu Lys Asp Val Ile Thr 130 135 140

Leu Arg Arg His Val Glu Thr Lys Val Arg Ala Lys Ile Arg Lys Arg 145 150 155 160

Lys Val Thr Thr Lys Ile Asn Arg His Asn Lys Ile Asn Gly Lys Arg 165 170 175

Lys Thr Ala Arg Lys Gln Lys Met Phe Gln Arg Ala Gln Glu Leu Arg 180 185 190 .

Arg Arg Ala Glu Asp Tyr His Lys Cys Lys Val Arg Ser Phe Leu Pro 195 200 205

Ala Val Ala Gly 210

<210> 1500

<211> 121

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (110)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (112)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (116)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1500

Met Ala Thr Leu Val Trp Arg Leu Tyr Leu Leu Gln Pro Glu Leu Val 1 10 15

Leu Pro Ser Pro Pro Pro Pro Pro Pro Arg Phe Pro Gly Pro Val Gln Thr 20 25 30

Pro Lys Ile Pro Gly Pro Ala Arg Gly Pro Arg Thr Gly Phe Gln Pro 35 40 45

Pro Ala Phe Ser Phe Pro Ser Pro Thr Pro Phe Phe Ser Ala Gly Thr 50 55 60

Pro Val Leu Ser Trp Lys Phe Ala Val Leu Cys Pro Ile Ala Gln Glu 65 70 75 80

Leu Leu Pro Ala Glu Lys Gly Ala Arg Asn Lys Cys Ser Gly Leu Ser 85 90 95

Arg Ser Tyr Ile Phe Ala Met Leu Pro Glu Met Gly Gly Xaa Asn Xaa 100 105 110

Leu Xaa Gln Xaa Asn Glu Trp His Gly
115 120

<210> 1501

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1501

Met Asp Arg Leu Lys Ser His Leu Thr Val Cys Phe Leu Pro Ser Val 1 5 15

Pro Phe Leu Ile Leu Val Ser Thr Leu Ala Thr Ala Lys Ser Val Thr 20 25 30

Asn Ser Thr Leu Asn Gly Thr Asn Val Val Leu Gly Ser Val Pro Val 35 40 45

Ile Ile Ala Arg Thr Asp His Ile Ile Val Lys Glu Gly Asn Ser Ala 50 55 60

Leu Ile Asn Cys Ser Val Tyr Gly Ile Pro Asp Pro Gln Phe Lys Trp 65 70 75 80

Tyr Asn Ser Ile Gly Lys Leu Leu Lys Glu Glu Glu Asp Glu Lys Glu 85 90 95

Arg Gly Gly Lys Trp Gln Met His Asp Ser Gly Leu Leu Asn Ile 100 105 110

Thr Lys Val Ser Phe Ser Asp Arg Gly Lys Tyr Thr Val Cys Gly Phe 115 120 125

<sup>&</sup>lt;210> 1502

<sup>&</sup>lt;211> 120

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

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<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
<000>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<320>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1502
Leu Glu Phe Lys Xaa Pro Xaa Xaa Gln Val Pro Pro Trp Xaa Trp Leu
Ser Leu Phe Lys Lys Tyr Arg Ser Ala Thr Ile Ala Asn Ala Arg Thr
                                  25
             2.0
Trp Val Phe Cys Ser Phe Phe Xaa Val Leu Ile Leu Leu Phe Leu Tyr
Asn Gly Val Ile Val Ile Asn Thr Asn Cys Ser Phe Trp Phe Ser Pro
                          55
His Cys His Phe Cys Pro Tyr Val Ser Leu Glu His Val Pro Gln Arg
Leu Trp Tyr Gln Ser Pro Val Pro Gly Leu Ile Ser Thr Ser His Ile
Thr Phe Val Met Phe Gln Ser Ser Tyr Glu Ala Cys Tyr Phe Phe Phe
            100
Ile Pro Gln Ala Tyr Phe His Arg
<210> 1503
<211> 409
<212> PRT
<213> Homo sapiens
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<400> 1503 Met Asp Arg Leu Lys Ser His Leu Thr Val Cys Phe Leu Pro Ser Val

| 1          |            |            | •          | 5          |            |            |            |            | 10         |            |            |            |            | 15         |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Pro        | Phe        | Leu        | Ile<br>20  | Leu        | Val        | Ser        | Thr        | Leu<br>25  | Ala        | Thr        | Ala        | Lys        | Ser<br>30  | Val        | Thr        |
| Asn        | Ser        | Thr<br>35  | Leu        | Asn        | Gly        | Thr        | Asn<br>40  | Val        | Val        | Leu        | Gly        | Ser<br>45  | Val        | Pro        | Val        |
| Ile        | Ile<br>50  | Ala        | Ārg        | Thr        | Asp        | His<br>55  | Ile        | Ile        | Val        | Lys        | Glu<br>60  | Gly        | Asn        | Ser        | Ala        |
| Leu<br>65  | Ile        | Asn        | Cys        | Ser        | Val<br>70  | Tyr        | Gly        | Iļe        | Pro        | Asp<br>75  | Pro        | Gln        | Phe        | Lys        | Trp<br>80  |
| Tyr        | Asn        | Ser        | Ile        | Gly<br>85  | Lys        | Leu        | Leu        | Lys        | Glu<br>90  | Glu        | Glu        | Asp        | Glu        | Lys<br>95  | Glu        |
| Arg        | Gly        | Gly        | Gly<br>100 | Lys        | Trp        | Gln        | Met        | His<br>105 | Asp        | Ser        | Gly        | Leu        | Leu<br>110 | Asn        | Ile        |
| Thr        | Lys        | Val<br>115 | Ser        | Phe        | Ser        | Asp        | Arg<br>120 | Gly        | Lys        | Tyr        | Thr        | Cys<br>125 | Val        | Ala        | Ser        |
| Asn        | Ile<br>130 | Tyr        | Gly        | Thr        | Val        | Asn<br>135 | Asn        | Thr        | Val        | Thr        | Leu<br>140 | Arg        | Val        | Ile        | Phe        |
| Thr<br>145 | Ser        | Gly        | Asp        | Met        | Gly<br>150 | Val        | Tyr        | Tyr        | Met        | Val<br>155 | Val        | Суѕ        | Leu        | Val        | Ala<br>160 |
| Phe        | Thr        | Ile        | Val        | Met<br>165 | Val        | Leu        | Asn        | Ile        | Thr<br>170 | Arg        | Leu        | Суѕ        | Met        | Met<br>175 | Ser        |
| Ser        | His        | Leu        | Lys<br>180 | Lys        | Thr        | Glu        | Lys        | Ala<br>185 | Ile        | Asn        | Glu        | Phe        | Phe<br>190 | Arg        | Thr        |
| Glu        | Gly        | Ala<br>195 | Glu        | Lys        | Leu        | Gln        | Lys<br>200 | Ala        | Phe        | Glu        | Ile        | Ala<br>205 | Lys        | Arg        | Ile        |
| Pro        | Ile<br>210 | Ile        | Thr        | Ser        | _Ala       | Lys<br>215 | Thr        | Leu        | Glu        | Leu        | Ala<br>220 | Lys        | Val        | Thr        | Gln        |
| Phe<br>225 | Lys        | Thr        | Met        | Glu        | Phe<br>230 | Ala        | Arg        | Tyr        | Ile        | Glu<br>235 | Glu        | Leu        | Ala        | Arg        | Ser<br>240 |
| Val        | Pro        | Leu        | Pro        | Pro<br>245 | Leu        | Ile        | Met        | Asn        | Cys<br>250 | Arg        | Thr        | Ile        | Met        | Glu<br>255 | Glu        |
| Ile        | Met        | Glu        | Val<br>260 | Val        | Gly        | Leu        | Glu        | Glu<br>265 | Gln        | Gly        | Gln        | Asn        | Phe<br>270 | Val        | Arg        |
| His        | Thr        | Pro<br>275 | Glu        | Gly        | Gln        | Glu        | Ala<br>280 | Ala        | Asp        | Arg        | Asp        | Glu<br>285 | Val        | Tyr        | Thr        |
| Ile        | Pro<br>290 | Asn        | Ser        | Leu        | Lys        | Arg<br>295 | Ser        | Asp        | Ser        | Pro        | Ala<br>300 | Ala        | Asp        | Ser        | Asp        |
| Ala<br>305 | Ser        | Ser        | Leu        | His        | Glu<br>310 | Gln        | Pro        | Gln        | Gln        | Ile<br>315 | Ala        | Ile        | Lys        | Val        | Ser<br>320 |
| Val        | His        | Pro        | Gln        | Ser        | Lys        | Lys        | Glu        | His        | Ala        | Asp        | Asp        | Gln        | Glu        | Gly        | Gly        |